STRENGTHENING FACULTY DEVELOPMENT IN MEDICAL EDUCATION THROUGH ACTION RESEARCH

A Thesis

Submitted to the Faculty of Graduate Studies and Research

in Partial Fulfilment of the Requirements for the Degree of

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by

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SUMMARY OF DISSERTATION

Submitted in partial fulfillment
of the requirements for the

DEGREE OF DOCTOR OF PHILOSOPHY
by
MARCEL D'EON

FALL 1997

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Enhancing Instructional Effectiveness in a College of Medicine

Much attention is paid to the teaching role of medical school faculty (Bland & Holloway, 1995; Steinert, 1993). An over-reliance on rote memorization of large quantities of seemingly unrelated facts, have been persistent problems in medical education for many decades (Small, Stevens & Duerson, 1993). Passive learning and stagnant lecture formats have been associated with this problem of information overload. Medical schools look to faculty development as an approach to introduce more active learning opportunities for their students.

The central purpose of this study was to learn more about faculty development through an action research protocol in a medical school setting. A framework for thinking about faculty development was formulated which included four components. First was the consideration of the nature of teaching and the premise that teaching be thought of as a social practice (Overgaard, 1994). This held implications for how to improve the professional practice of teaching. The second component was a performance orientation (Nowlen, 1988) which expanded the horizon of factors to include personal and cultural ones. Another component was characteristics of successful programs, especially the needs assessment (Bland, 1980) and other practical elements. Finally, to emphasize the support role of this component, were considerations of the effect which the social and organizational environment has on the quality of teaching (Seldin, 1990; Weimer, 1990). Specific attention was paid to the ideas of small groups of teachers examining their practice together (Guskey, 1995) and to faculty leaders working to provide support for effective teaching (Green, 1994). This framework was used to critique and to guide the design and implementation of faculty development programs which emanated from this study.

An action research methodology was used because of its dual role of adding to the stock of knowledge about a field of inquiry, such as faculty development, and providing benefit to a specific client group, such as a medical school (Aguinus, 1993). Kurt Lewin's traditional action research cycle (Stone, 1980) was modified by integrating action research with evaluation studies. Conceptually and methodologically there are many important similarities with some striking contrasts as well. The evaluation literature enriched this action research study by providing concrete guidelines for organizing, carrying out, and assessing this study.

This research was conducted at the College of Medicine, University of Saskatchewan . The Dean of Medicine has made faculty development a priority and had allocated resources accordingly. Several initiatives to enhance teaching and learning had been introduced prior to beginning this study including a system for the evaluation of teaching and a three-day intensive workshop on teaching. Faculty leaders at this site were, at the time of this study, making progress in the area of faculty development.

This study spawned several important activities. A crucial evaluation of a key faculty development program at the College was completed. A needs assessment survey, administered to all full-time faculty, select part-time faculty, and medical students, collected information about both faculty preferences for teaching development sessions and organizational supports and impediments to effective teaching. A faculty development program was designed, implemented, and evaluated, and then offered again. Workshops for faculty leaders were offered to raise awareness of educational issues and to contribute to the creation and maintenance of an organizational environment which supports and encourages the deliberate and systematic quest for instructional quality (Weimer, 1990). Instructional study groups were begun to help develop a network of faculty interested in and supportive of teaching.

Through this action research study, the activities and the analysis which took place as a result, more was learned about faculty development and action research, and the College of Medicine benefited materially. The central purpose of this study was achieved.

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Dedication

This thesis is dedicated to the men and women, teachers and those who support them, who work dauntlessly in the field medical education. Theirs is a noble and difficult duty, to train and educate another generation of physicians who will care for the ailing of society and help ensure healthy living for all. I hope that this work of mine will in some small way make that mission more rewarding and more attainable.

Abstract

Much attention is paid to the teaching role of medical school faculty (Bland & Holloway, 1995; Steinert, 1993). Over-reliance on rote memorization and the teaching of large quantities of seemingly unrelated facts have been persistent problems in medical education for many decades (Small, Stevens & Duerson, 1993). Passive learning and stagnant lecture formats have been associated with this problem of information overload. Medical schools expect faculty development to be an approach to infusing more active learning opportunities for their students.

Through the activities and the analysis which took place as a result of this action research study faculty development in medical education was improved and interesting theoretical formulations created. An original framework for thinking about faculty development was designed and presented. The first of the four components was the premise that teaching be thought of as a social practice (Overgaard, 1994) which naturally led to implications for how to improve the professional practice of teaching. This innovative concept was very helpful in conceptualizing faculty development and finding practical ways to improve its practice. The second component was a performance orientation to continuing education (Nowlen, 1988) which expanded the horizon of factors influencing performance to include personal and cultural ones. Another component was characteristics of successful programs, especially the needs assessment (Bland, 1980) and other practical elements. The fourth component consisted of the social and organizational supports for teaching (Seldin, 1990; Weimer, 1990) including small groups of teachers examining their practice together (Guskey, 1995) and faculty leaders working to change the organization (Green, 1994). This framework was used to critique and to guide the design and implementation of faculty development programs which emanated from this study.

An action research methodology was used because of its dual role of adding to the stock of knowledge about a field of inquiry and providing benefit to a specific client group (Aguinus, 1993). Kurt Lewin's traditional action research cycle (Stone, 1980) was modified in two significant ways. First, instead of beginning with with planning and acting stages, the model proposed in this study started with observing and reflecting stages. Second, action research was successfully integrated both practically and conceptually with program evaluation studies.

This research was conducted at the College of Medicine, University of Saskatchewan

where the Dean of Medicine had made faculty development a priority and had allocated resources accordingly. Several initiatives to enhance teaching and learning had been introduced prior to beginning this study including a system for the evaluation of teaching and a three-day intensive workshop on teaching. Prior to this study beginning, faculty leaders at this site were making progress in the area of faculty development.

This study spawned several important activities over and above those already in existence at the College. A crucial evaluation of a key faculty development program (Teaching Improvement Project Systems -TIPS) at the College was completed. This had a large impact at the College and was a Canadian first. A needs assessment survey, administered to all full-time faculty, select part-time faculty, and medical students, collected information about both faculty preferences for teaching development sessions and organizational supports and impediments to effective teaching. The information collected has generated many interesting hypotheses particularly related to the motivation of faculty for teaching and pointed the way to further needed research and practical recommendations for action. A faculty development program was designed, implemented, and evaluated, and then offered again. Workshops for faculty leaders were offered to raise awareness of educational issues and to contribute to the creation and maintenance of an organizational environment which supports and encourages the deliberate and systematic quest for instructional quality (Weimer, 1990). Instructional study groups were begun to help develop a network of faculty interested in and supportive of teaching. Initiatives in the area of organizational and social supports for teaching were especially innovative.

Acknowledgements

I wish to acknowledge the support and guidance provided me by my committee. For two and a half years Kevin Wilson (then my advisor and now retired) played a key role in the formation and development of this study. In these last six months it was Keith Walker (my advisor and now on sabbatical) whose keen insights helped to make this thesis the accomplishment that it is and whose steady encouragement gave me incentive to continue working on yet another revision when my own inclinations might have led me to simply give up. Jim Spooner and Sheila Harding of the College of Medicine provided unceasing support and heartening companionship during the long months of research and writing and whom I now have the honour of calling colleagues. Special thanks are due to Dr. David Popkin, Dean of Medicine, for his unwavering support, both moral and material, of faculty development and the educational mission of the College.
I also wish to thank my wife, Jocelyn, and children Marc, Paulette, Jean-Luc, and David for their support and patience while Dad struggled to finish his research and find a "real job" once again.

"In everything God works for good with those who love him."
Romans 8:28

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CHAPTER I

LEARNING MORE ABOUT FACULTY DEVELOPMENT

The central purpose of this study was to learn more about faculty development using action research in a medical school setting. Medical school instructors have generally received little training in the processes of teaching and learning despite the fact that teaching is a major role and responsibility (Eble & McKeachie, 1983). With the increasing value placed on teaching in higher education (Astin & Chang, 1995; Lucas, 1994; Eison & Stevens, 1995.) and medical education in particular (Bland & Holloway, 1995; Steinert, 1993), faculty development for teaching enhancement has become a more central concern for these institutions (Hitchcock, Stritter, & Bland, 1993). In this study questions about effective faculty development are raised and answered through action research. Action research, described and analyzed in Chapter III, is a powerful methodology for finding answers to real-life questions and for gaining more generalizable knowledge about a particular topic of inquiry (Stone, 1980). This study also reflected on the efficacy of action research as an approach to the investigation of both faculty development generally and a specific set of medical school faculty development initiatives in particular.

In this chapter I will outline various and evolving definitions of faculty development and justify the purpose of this study through an examination of some of the longstanding problems in the education of medical students. I believe that faculty development is one answer to these challenges in medical education and that finding out how best to help doctors and scientists become better teachers is a worthwhile research and management activity.

What Is Faculty Development?

In this section I answer the question, "What exactly is meant by, and what should be

meant by, the term 'faculty development'." Both the medical education and post-secondary education communities recognize the importance of faculty development and have made theoretical advances in that field. In this next section I examine some of the literature which supports my choice of definitions. I also explain the difference between faculty development and instructional development to justify this studies focus on faculty development.

Faculty Development in Post-Secondary Education and Medical Education

There are various definitions of faculty development used in higher education. Jason, Westburg, Slotnick, and Lefever (1982) limit faculty development to be "all those activities that can help teachers become more effective instructors" (p. 302) while at the same time acknowledging that some authors include other competencies related to faculty responsibilities. Bland (1980) is one such author who includes in her definition of faculty development training for teaching, administration, and research. Hitchcock, Stritter and Bland (1993) document a historical change in the practice of faculty development from a concentration on skills for teaching to include skills for research, administration and other activities. Certainly a faculty member's role is not limited to just teaching. This expanded and more inclusive definition of faculty development has been generally accepted within the medical education community (Holloway, Wilkerson & Hejdek, 1997). There are therefore good historical and practical reasons for accepting this expanded sense of faculty development.

As well, the individual faculty member's personal life and background are being recognized as major factors in performance (Diegmueller, 1991; Krupp, 1991; Nowlen, 1988). Many scholars thus prefer an even broader definition of faculty development which includes personal management, health, and growth (Millis, 1994; Wheeler & Schuster, 1990) as well as increased competencies in teaching, research, and administration. I have chosen to include these considerations of personal management in my definition of faculty development.

For the purposes of this study, in agreement with the recent trends, faculty development was taken to be all those processes and activities, including personal health and management improvement, which contribute to the enhanced performance of faculty in teaching, research, and administration. The literature in the field of public education which deals with "professional

development" and "staff development" further validate this definition of faculty development which I chose. Writers in this field emphasize the improved performance of teachers through the acquisition of job-related competencies and personal management skills (Guskey & Huberman, 1995; Griffin, 1990; Sparks & Loucks-Horsley, 1990).

Discussions of faculty development now frequently include the consideration of organizational development (Hitchcock, Stritter & Bland, 1993). In the same way, staff development in public education has evolved to include an organizational component (Guskey, 1995; Little, 1981; McLure, 1990; Overgaard, 1994; Smylie, 1995; Snyder, Acker-Hocevar & Snyder, 1996). A focus on the organization is one of the latest directions found in the faculty development literature (Bland, Schmitz, Stritter, Henry & Aluise, 1990; Bland, 1997; Green, 1990; Irby, 1993; Schuster & Wheeler, 1990; Seldin, 1990) and is explained more fully in Chapter II. I chose not to include an organizational component in the definition of faculty development. Instead, I decided to recognize the contribution which organizational development makes to the effectiveness of faculty development interventions and include an organizational and social component in a framework for thinking about teaching and faculty development formulated in Chapter II.

Notwithstanding the definition of faculty development advanced above, I concentrated this research project on that aspect of faculty development which includes teaching competencies only. I did not write a new definition of faculty development; I simply chose to focus on a more specific aspect included within a broader definition. I did not intend to study continuing medical education (the professional development for practitioners that will help them to become better clinicians) or research or administrative skills (other than those included in organizational development which directly support teaching. The focus was clearly on helping faculty become better teachers and for the purpose of this study I intend to mean faculty development for teaching whenever I use the term faculty development. The reason for this choice will become clearer after exploring the need to improve teaching and learning within the context of medical education.

Faculty and Instructional Development

Related and overlapping terms have the potential to confuse rather than clarify the discussion about improving faculty development. Instructional development, one of the related concepts, focuses on the students, the course, or the curriculum to improve learning (Cosby, 1995). It may be summarized as that area of education which deals with the methods that teachers use to facilitate learning. Instructor development, on the other hand, could mean the same as faculty development (for the improvement of teaching). It is not hard to see how instructional development and instructor development could be confused and with them faculty development. Organizational development, the other term, is intended to improve institutional resources or climate in support of the various roles of faculty including teaching (Cosby, 1995; Millis, 1994).

Chapters II and V describe the research into organizational development as it related to the support of teaching. On the other hand, instructional development was not included in this study of faculty development, although I fully recognize the important contribution which instructional development makes to medical education. I was not interested in researching the best methods and techniques to help medical students learn. I assumed that adequate instructional methods and guidelines were available to faculty and I was more interested in

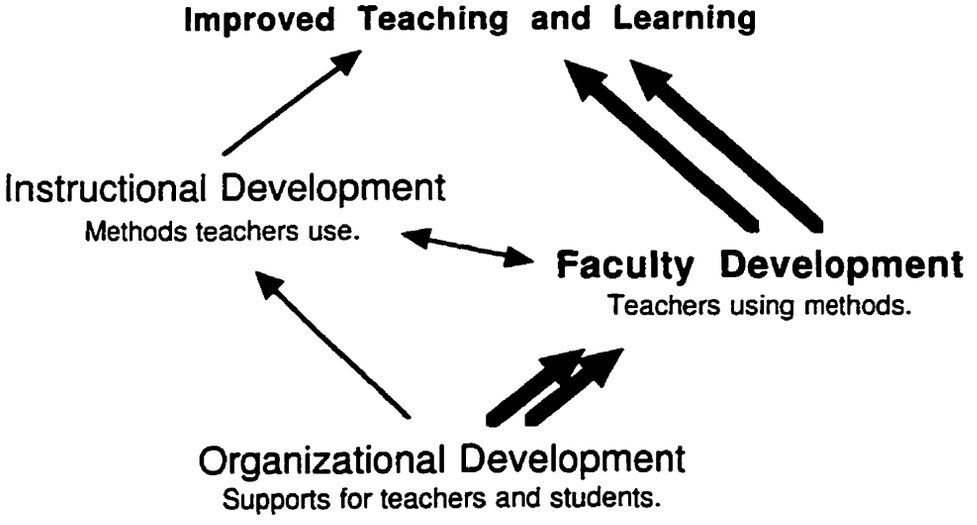

Figure 1: The research focus: Factors influencing teaching and learning.

learning about how faculty members could acquire the skills to use and apply these instructional methods. (As Chapter VII reveals, this assumption may not be unassailable.)

Figure 1 shows the relationship among instructional development, faculty development, and organizational development as I have described them in this chapter. Both faculty and instructional development contribute to improved teaching and learning and to each other as indicated by the arrows. Arrows also depict support emanating from the organization. Figure 1 also shows, by the heavy double arrows pointing towards and emanating form the teaching aspect of faculty development, the research focus I decided to take. Notice how instructional development did not form part of the study but is recognized as playing an important part of improving teaching and learning.

Significance of This Study

Medical education concerns itself with the quality of training which prospective doctors and specialists in training (residents) receive from the hundreds of medical schools all over the world. For several decades at least, medical education has tried to overcome the serious problem of "cognitive stuffing" (Small, Stevens & Duerson, 1993). This term is used in a three day intensive workshop on teaching for medical school instructors (introduced and explained in Chapter IV) and describes the process of trying to cram as much information into medical students as possible, in as little time as possible. Faculty development may be one key to beginning to solve this endemic problem facing medical education (Hitchcock, Stritter, & Bland, 1993).

"Cognitive Stuffing" and the Need for Effective Faculty Development

Cognitive stuffing is a pedagogical action taken by medical school faculty in response to the burgeoning amount of information in medicine. It is an attempt at a quick, surface transfer of some of this scientific and clinical information into the minds of students and it usually results in "factual overload" rather than a deep understanding of the material (Entwhistle, 1992). Unfortunately, it precludes the pursuit of critical appraisal and communication skills and favours the

most efficient delivery method, the didactic lecture (Bok, 1989; Entwhistle, 1992). Transferring facts through a lecture format is often mistaken for teaching (Rogers, 1987). The result of factual overload and cognitive stuffing is that medical students generally receive the basic scientific and clinical facts in unmanageable abundance, but they are not taught to think or to apply the information to clinical situations which involve students.

Small, Stevens and Duerson (1993) assert that factual overload has been a significant problem in medical education for over a century. For example, the Flexner Report (Flexner, 1910) described an extensive evaluation of medical education in North America. Flexner tried to promote the ideal of an educated physician, in the broadest sense, a physician who could reason and understand. Even in Flexner's day, information was increasing at a rate that was impossible for the human memory to match (Hudson, 1992). "Our fresh young graduate ... must, once more, understand; not otherwise can he adopt the new agents and new methods issuing at intervals from each of a dozen fertile laboratories; for rote has no future: it stops where it is" (Flexner, 1910, p. 25).

The problem of rote learning did not go away with the publication of the Flexner Report. In 1944 the following comments appeared in a report on medical education prepared for the Royal College of Physicians of Great Britain quoted in Maddison (1978):

> The average medical graduate has difficulties which are to be attributed chiefly to the manner of his training. He tends to lack curiosity and initiative, his powers of observation are relatively underdeveloped; his ability to arrange and interpret facts is poor; he lacks precision in the use of words. In short, his training, however satisfactory it may have been in the technical sense, has been unsatisfactory as an education. (p. 105)

Maddison concluded that many of the contemporary problems of medical education were similar to those articulated in the 1940's. He enumerated seven specific deficiencies of his era, four of which are listed below:

1. Faced with the information explosion, medical students are still being taught through a passive information transfer and are not learning how to learn;

2. Medical students have not received assistance in establishing effective rapport and communication skills;

3. Medical students lose their humanity and idealism and need assistance in dealing with the human side of their privileged profession; and

4. The motivation of medical students is crushed by inappropriate content, especially the memorization of minute scientific details that turn out to be of little value. (pp. 97-102)

Educational psychology leads us to see the connection between the serious motivational and performance deficiencies and the problem of factual overload (Ames & Ames, 1986). For instance, rote learning does not allow for easy assimilation of new material thus increasing the necessity to rely on more rote learning (see #1 above). Lack of meaning in the information that is presented results in less motivation to continue learning (see # 4 above). Cognitive stuffing creates more challenges, perhaps problems, than simply trying to keep up with the information explosion.

Responses to cognitive stuffing: faculty development. Cognitive stuffing is still a concern of medical education. In 1984 the Panel of the General Professional Education of the Physician (GPEP) and the College Preparation for Medicine completed its report for the Association of American Medical Colleges (AAMC). It affirmed the need for a general preparation of physicians -- providing physicians with the abilities to respond to patients' personal concerns and problems -- as well as preparing the physicians for specialized training. It recommended a shift of emphasis from rote memorization of discrete facts to an emphasis on independent learning and reduced lecture time. The GPEP Report clearly recommended that attention be paid to the preparation of those who would supervise and teach medical students. This was a direct call for more and higher quality faculty development for the purpose of improving teaching and learning.

The need for effective faculty development for medical school instructors is clearly evidenced by a follow-up to the GPEP Report (AAMC, 1984). Educating Medical Students: Assessing Change in Medical Education - the Road to Implementation (ACME - TRI), lamented the fact that little progress had been made in addressing the recurring problems in medical education (AAMC, 1992). The ACME - TRI Report, based on a 1990 survey of 84 Canadian and American alopathic medical schools, recommended that greater resources be allocated to help faculty acquire the skills needed to be facilitators of learning (and not just transmitters of knowledge). The new teachers would be able to (a) use alternate assessment techniques, (b) teach to specific objectives or outcomes, (c) encourage lifelong and self-directed learning, and (d) decrease the use of lectures in favour of information management skills. Faculty development is a major concern of the medical education community as it seeks to improve instruction and overcome, in

particular, the problem of cognitive stuffing. The results of this study have produced insights into effective faculty development which can help reduce cognitive stuffing.

Evaluating faculty development. Faculty development has been suggested as an effective response to cognitive stuffing. Although there is a great deal of faculty development being conducted, there has been very little evaluation of claims that it has been effective (Reid, Stritter & Arndt, 1997; Skeff, Stratos, Mygdal, DeWitt, Manfred, Quirk, Roberts, & Greenberg, 1997). Without this information it is difficult for decision-makers to support programs and allocate scant resources to these purposes (Holloway, Wilkerson, & Hejdek, 1997). This study meets a serious need in medical education to evaluate faculty development programs.

Delimitations

There are certain parameters which I imposed on this study to make it more manageable and focused. As already stated, I chose to research only one aspect of faculty development: the improvement of teaching. Attention could have been paid to the other aspects such as research, service, administration, and personal management and growth. CHoosing the teaching functin alone was a major delimitation which I introduced earlier in the chapter to be able to discuss, in a meaningful way, cognitive stuffing and its relationship to faculty development. As well, I made the distinction between faculty and instructional development and chose not to research the latter. In this next section I explain other delimitations of the study.

Student learning. The criterion of success of faculty development was taken to be a strengthening of teaching knowledge, skills, and attitudes. This delimitation is congruous with the decision to exclude instructional development factors from this study. This means that trying to identify student learning as a result of faculty development efforts was not undertaken. I operated under the assumption that good teaching practices,ones that were research based, would lead to improved student learning.

Problem-based learning (PBL). Problem-based learning is an innovative curriculum approach to medical education. There is no one definition of PBL but it is generally considered to include a curricular orientation around clinical problems, an integration of clinical and basic science components, and an emphasis on thinking processes and not just knowledge acquisition (Walton

& Matthews, 1989) The conditions which are thought to enhance PBL are small group tutorials, student-centred teaching, active learning, self-study, and simulations of real cases (Walton & Matthews). PBL is reported to enhance the application and retention of knowledge, motivation and ability for continued learning, and the improvement of skills for assessing oneself (Coles, 1983; Schmidt, 1983; Shahabudin, 1987; Walton & Matthews, 1989). Some medical schools have moved to a PBL curriculum as an "antidote" to cognitive stuffing (Walton & Matthews,1989; Schmidt, 1983). This change requires massive faculty development and investment in curriculum redesign. There is much controversy over which curriculum is more effective (Coles, 1985; Newble & Clarke, 1986) and more efficient. This study tackled the problem of cognitive stuffing, instead, through faculty development without altering the curriculum as it existed in its more traditional form.

Learning organization. This action research study could easily have dwelt on the concept of the "learning organization." Certainly there are similarities between action research, evaluation research, and the learning that takes place in organizations (Wildavsky, 1985). It may be that such intervention strategies as action research and evaluation studies lead to organizational learning. However, I decided not to delve into the theory of organizational learning. Readers might be able to tease out data from this study which could support any number of hypotheses about learning organizations, but I will not be doing that for them.

Theory of professional practice. This is not a study about adult and professional learning nor is it about a theory of the professional practice of teaching although I have drawn heavily from the literature of these fields to substantiate the direction I have taken with faculty development as will be seen in Chapter II. The socio-historical psychology of Vygotsky (Blanck, 1990), the constructive-developmental psychology of Kegan (1982), and Nowlen's (1988) approach to continuing education for professionals are all of great interest to me and could contribute to the further understanding of faculty development. I will leave deeper exploration of these ideas for other researchers or for other times.

A particular medical school. In Chapter III and IV I describe the setting in which this research took place. I made the choice based on mutual adaptability and acceptance. I did not poll or consider all the possible medical schools in Canada. My selection was motivated more by convenience and good fortune than by the application of predetermined, objective criteria.

Overview of This Study

In this chapter I pointed out that one of the predominant problems in medical education is the cognitive stuffing of factual information into students by instructors. This persistent overemphasis on facts and knowledge, rather than problem solving and patient management skills, has been a source of frustration to medical educators for many decades. In spite of the attention paid to this situation by the medical education community, it seems that little has changed. Faculty development is seen as a possible solution to this dilemma.

I chose to define faculty development as all those processes and activities, including the improvement of personal health and management, which contribute to the enhanced performance of faculty in teaching, research, and administration. While acknowledging this broader definition of faculty development, I chose to limit this study to the improvement of teaching, a considerable and worthwhile challenge in and of itself.

In Chapter II, working from a synthesis of selected literature, I presented an original framework for thinking about faculty development. This framework includes (a) elements of teaching as a social practice, (b) both competency and performance orientations, (c) observance of characteristics of successful programs including needs assessments and careful implementation, and (d) organizational and social supports. I used this framework in Chapter IV and V to evaluate both existing and newly initiated programs in faculty development at the chosen research site.

In Chapter III, I focused on the methodology of action research. From a variety of types of action research, I synthesized an approach which was appropriate for this study. I argued for the knowledge claims made by action research. I related action research to other action oriented social sciences and to evaluation studies in particular. In Chapter III the research site, the College of Medicine at the University of Saskatchewan, was introduced and I gave a brief description of the specific methodology which I employed.

Chapter IV began the description of the action research project. In Chapter IV I reported on the evaluation of existing faculty development programs and the initiation of new programs at the College of Medicine. In Chapter V, I described the efforts to influence the organizational and social supports for teaching. Chapter VI is devoted to a retrospective evaluation of the action

research project itself, where, among other considerations, I used sets of standards of practice from two related disciplines, evaluation and organizational and human systems development.

Chapter VII outlines the main accomplishments of this study as related to its purpose. I also provided an analysis of the efficacy of faculty development to actually improve teaching and learning and deal with the problem of cognitive stuffing. In the final chapter I considered whether I did learn more about faculty development through action research in a specific medical school setting.

CHAPTER II

A FRAMEWORK FOR THINKING ABOUT FACULTY DEVELOPMENT

There are numerous empirical and theoretical models which answer the central question of this study, "Which faculty development programs will work best in a particular medical school?" However, there are many factors which are typically associated with successful programs. Consequently here is no easy answer to that question. Weimer (1990) writes, "No evidence documents the superior success of effectiveness of one option over another" (p.168). This is the case, as Weimer suggests, because of the unique institutional settings in which faculty development occurs (also Guskey, 1995) and, as Green (1990) infers, because of the variety of learning styles and concerns of those faculty members who are trying to teach more effectively. Devising a framework for effective faculty development demands attention to several components.

This chapter is a synthesis of selected articles and books taken from the literature on faculty and professional development that showed promise for achieving the purpose of the study. I will present here a framework for thinking about faculty development along with an explanation of what I consider to be important considerations in judging the value of faculty development programs and sessions. I will first examine the nature of teaching, since, without a common understanding of teaching on a n empirical level , there can be no agreement on a theoretical level about how one might go about improving the professional practice of teaching. I then point out important considerations in organizing or judging faculty development programs consistent with the definition and delimitations I advanced in Chapter I, namely, helping faculty become more effective teachers. Finally, in the last section of this chapter, I investigate the effect which the social and organizational environment has on the quality of teaching. The framework I advance for thinking about effective faculty development includes (a) elements of teaching as a social practice, (b) both competency and performance orientations, (c) observance of

characteristics of successful programs including needs assessments and careful implementation. and (d) organizational and social supports.

This chapter begins a progressive disclosure of the literature related to the purpose of this study. Throughout this dissertation, and not just in this chapter, references and explanations from the literature have been provided. The review of the literature begins in this chapter but continues in the other chapters where appropriate.

Teaching as Social Practice

The first component of my framework for thinking about faculty development includes looking at teaching as a social practice. Much of what is generally believed to be good practice for faculty development hinges on assumptions of what teaching is. It is therefore wise to raise the issue of the nature of the professional practice of teaching early in the deliberations about faculty development. Such investigations will yield insights into the strength of certain kinds of faculty development and will indicate ways of organizing faculty development programs more effectively. Moreover, it is useful, for purposes of strengthening the theory and practice of faculty development, to think of teaching as a social practice (Overgaard, 1994).

The Nature of Teaching

Overgaard (1994) has identified five essential features of teaching in schools which I have extended to apply to medical education. She argues that these attributes of teaching lead us to conceive of teaching as a social practice.

Teaching is purposive. Teaching is first purposive, having the intention to accomplish something specific, namely, student learning and growth. In medical school the goal is to train medical practitioners who will be able to serve the community well (Medical Council of Canada, 1992; White, 1989).

Teaching is characterized by a variety of activities. There are many disparate activities that can be called teaching which need to be evaluated to the extent that they can achieve the

purposes of the practice. Whether one uses problem-based approaches, small group discussions, bed-side case analysis, or lectures, medical school faculty are said to be teaching if they are furthering the education of medical students.

Teaching is rational. Third, teaching is rational; it is logically and deliberately tied to its purpose although this rationality may not be transparently evident in some cases. Faculty make choices regarding how to lecture, which approach and content will be useful, when to introduce material, and a myriad of other instructional decisions. These are arguably based on notions of the purpose of teaching, on the prevailing norms of teaching, or on precedent.

Teaching is social. Teaching is also social in that the norms of the work group and relevant peers have a part to play in shaping the way that individuals teach. Similarly, the way that professors teach has an effect on the group and the norms which govern the teaching. This social-psychological aspect of teaching is particularly powerful and often hidden or inaccessible to the casual observer.

Teaching is moral. Finally, teaching is characterized by two moral aspects. First, teachers care for the students' intellectual development at the least and, in some respects, have an interest in their general well-being. Many faculty are motivated to teach because they want to contribute to the shaping of a new generation of physicians. Second, teachers are engaged in social interaction with students which, in itself, renders a moral obligation, as would any social relationship (Overgaard, 1994).

Alternative Ways of Thinking About Teaching

Though thinking about teaching as a social practice with the five characteristics noted above may seem particularly befitting, there are other perspectives to consider. Two of the more prevalent conceptions are outlined briefly below. It is important to identify these to more appropriately critique faculty development programs which emanate from these other, less satisfying, ways of thinking about teaching.

Teaching as a technical enterprise. Conceptions of teaching as a science for which generalizable principles of practice can be identified and then transferred to practitioners in the field denote teaching as a technical enterprise. Other characteristics include a distinct focus on

means and pursuit of efficiency and effectiveness (Overgaard, 1994). The attention to means obscures the choice of ends and primarily focuses on ends which are straightforward and determinate. These means are then systematically studied to yield generalizable principles with relatively simple applications, valued for their efficiency and effectiveness (Overgaard, 1994). Teaching is not adequately described by these three characteristics alone; it is more than a technical enterprise and perhaps it is not a technical enterprise at all.

Faculty development which focuses on the acquisition of discrete skills and generalizable principles of teaching will not be entirely successful because it does not account for the essential features of teaching such as the social, moral, and purposeful elements. Faculty development in this model concentrates on the rational and the improvements of the activities of teaching.

Teaching as craft. When we think of teaching as a craft, we imagine teachers making judgments in the context of their work and learning through a process of observation and reflection-on-action (Schon, 1987). This is an improvement over the conception of teaching as a technical enterprise in that it gives teachers much more credit for thoughtful action and intelligent behaviour. This conception of teaching also highlights the complexity of the environment in which teaching takes place. It states that there are indeterminate zones of practice in teaching with which technical rationality is ill equipped to deal (Overgaard, 1994; Schon, 1987).

Faculty development which tries to provide assistance to teachers so that they can make judgments and reflect on their actions addresses the rational and purposive nature of teaching, as well as the specific activities of the craft. Such faculty development, however, does not adequately account for the social element of the nature of teaching and does not necessarily deal with the moral element either.

Teaching as a Social Practice: Conclusion

In this section I have briefly outlined a new way to think about teaching. There are various ways to conceive of teaching and I have given reasons to avoid conceptions of teaching as merely a technical enterprise or a craft. A more powerful approach is to think about teaching as a social practice with purpose, rationality, a variety of activities, and social and moral components. Thinking about teaching as a social practice is the first element in my framework for looking at

faculty development. I now turn to the next element, theoretical consideration in the design of faculty development programs.

Competency and Performance Orientations in Faculty Development

In the discussion which follows I probe two outcome orientations for faculty development. I then integrate them with considerations of teaching as a social practice to add to my framework for thinking about faculty development programs. Faculty development might be considered to be a service delivery activity of developing programs and providing courses. On the other hand, faculty development could be results or outcome oriented. One outcome of faculty development is enhanced competency of faculty in the area of teaching. Another outcome is improved performance in teaching, a more elusive but more desirable goal which is becoming the focus of training and development organizations (Kirkpatrick, 1982; Kinlaw, 1993; Robinson & Robinson, 1995; Gilley & Boughton, 1996). To my framework of faculty development I introduce performance and the influence of factors beyond the skills and competencies of the individual.

Competency Orientation to Faculty Development Outcomes

The first issue I will engage is the intended outcomes of faculty development, namely increased competency in teaching. A focus on competence is considered an advance over that of an older, less effective target which was simply to "up-date" the learners, or provide them with the most recent information (Nowlen, 1988). Focusing on competence, a fundamental outcome of faculty development, means aiming for the acquisition of skills usually through the use of basic adult learning principles.

Acquiring skills for increased competency. The notion of competence training is a dominant framework for continuing professional education (Nowlen, 1988). Competency is usually defined as aptitude, skill, knowledge, strength and judgment embedded within a job context, standards, and expectations (p. 31). Conceptions of teaching, both as a technical

enterprise and as a craft, imply a pursuit of professional skills focused mainly, but not thoroughly, on the rational characteristic of teaching, and certainly does not sufficiently address the implications for the social, moral, and purposeful aspects of teaching (Overgaard, 1994). This does not mean that effective faculty development should not attend to the competencies needed for teaching and professional practice. It only means that faculty development needs to move beyond this narrow focus and accommodate more aspects of what it teaching entails.

Adult learning principles in competency training. Some of the literature on faculty development addresses the need for individual faculty members to receive appropriate support and assistance to become more effective and competent teachers (Irby, 1993). Much has been written concerning the theory of adult learning proposed by Malcolm Knowles (1980). Once widely hailed as a modern break-through, it now faces serious criticism. Carroll (1993) writes about the implications of adult learning theory for medical school faculty development programs. I have added to this exposition the work of Zemke & Zemke (1995) on the implications of adult learning theory for trainers in business and industry. Their work highlights some general principles of adult learning appropriate to the design of faculty development programs that address the rational nature of teaching and teaching improvement. Recommendations cover the motivation to learn, curriculum design, and classroom practice.

First, the motivation to learn is a key issue in adult learning. Adults can be herded into classrooms and pushed into seats, but they cannot be forced to learn. Motivation to learn can be increased by (a) stimulating curiosity, (b) demonstrating utility, (c) ensuring low risk, (d) exploring learners' positive and negative expectations, and (e) appealing to personal and professional growth (Zemke & Zemke, 1995).

Second, curriculum design has been influenced by adult learning theory. Traditional curriculum is considered to be generally ineffective (Zemke & Zemke, 1995). The following guidelines that have been offered for designing curriculum. The learning experience should (a) have plenty of application, (b) include pre-program assessment of entry-level knowledge, (c) promote integration with prior learning, (d) include regular feedback, (e) account for learning style differences, and (f) design in strategies that promote transfer to the work place.

Third, classroom practice is different than what we have traditionally seen. The following are some useful guidelines distilled from the literature about effective teaching. Those leading

adult learning sessions need to create a safe and comfortable environment, use facilitation techniques such as (a) setting goals; (b) using questioning skilfully; (c) balancing the session with a variety of materials and activities; and (d) maintaining mutual respect for persons and ideas (Zemke & Zemke, 1995).

At this point it is wise to reintroduce a caution concerning adult learning principles. These principles are highly individualistic and do not account for the social dimension of teaching so well incorporated in thinking about teaching as a social practice. They are helpful guides in building and detecting effective faculty development programs. I mean only to point out that the principles of adult learning are not sufficient in themselves to provide for either a thorough review of or construction of faculty development programs.

Performance Orientation to Faculty Development Outcomes

The performance orientation advocated by Nowlen (1988) moves beyond the individualistic thinking about competencies (and encouraged by current adult learning theory) into a more holistic consideration of the present context and past environments which affect individual performance. Nowlen accounts for the interaction of the individual and the culture to produce growth in competence. The individual is held to be socially both unique and composite. "Both the individual and culture are active agents in this process, functioning as two interactive strands of influences, supporting or thwarting development" (Nowlen, 1988, p. 67). Nowlen's main thesis is that performance on the job is a function of the individual interacting with the context to induce levels of achievement. This is a similar proposition to Kurt Lewin's conceptualization of behaviour as a function of both the individual and the environment (Guest, 1984; Lewin, 1952) and resonates well with Vygotsky's socio-historical psychology (Blanck, 1990) explained in more detail in Chapter III as it relates to action research. The performance model prompts faculty developers to look not only to the ways that individuals learn certain competencies, but also to the context in which these skills are learned and subsequently performed. The social and organizational environments interact with individual competencies to mediate performance and development; they play a very strong supporting role in learning and development.

This performance orientation can be integrated with the social practice model. Thinking

about teaching as a social practice already includes one feature of the performance orientation -- the effect of the social context on practice -- but does not include the notion of the personal mediation of performance. The social practice model does not account for the effect of personal factors, such as stress and illness, for example, on teaching performance.

The social practice model can be enriched by the simple inclusion of precisely this point within the existing framework. Teaching, then, can be thought of as a social practice in which the performance of the practitioners is affected by their total development and personal/social situation, not simply by their individual competencies and social context. This broader view now sets out the essential framework for thinking about effective faculty development which I have tried to explain.

Implications for faculty development. We know that faculty development in the integrated social practice/performance oriented framework would include ways to assist faculty in appreciating and dealing with the influence of social norms on their practice. To this we have included accounting for the impact which personal concerns and situations have on the performance of individuals. This is a key point in the framework and is consistent with the broad definition of faculty development (which included personal growth and management) advanced in Chapter I.

Fullan (1991) was consistent with this view when he wrote, "teacher development depends not only on individuals, but also on the teachers and administrators with whom he or she works" (p. 315). Faculty development in the social practice/performance orientation accounts for the influence of the prevailing ways of thinking about teaching on the learning of new and better ways to teach. Faculty development would allow teachers to reflect together on how their activities contribute to the educational purposes and even whether those purposes are fitting for the students they teach. Darling-Hammond (1996) reports that teachers in public schools who have access to teacher networks, enriched professional roles, and collegial work experience raised levels of motivation both in the short and the long term. One mechanism for accommodating a focus on performance and a concern for the social element of teaching is the study group explained more fully in Chapter V. What I am suggesting as a framework for thinking about faculty development based on a discussion and synthesis of theory has been hinted at through empirical studies such as those of Darling-Hammond and Fullan referred to above.

Characteristics of Successful Faculty Development Programs

In this section I will develop the third component to my framework for thinking about faculty development. Having integrated the notion of thinking about teaching as a social practice with both competency and performance orientations to faculty development, I now turn to certain empirical models of faculty development which provide further guidance for the establishment and evaluation of successful faculty development programs.

The concept of success that pervades the models from both the staff development and medical education literature is the extent to which they contribute to changes in teachers' knowledge, skills, and attitudes. The objectives of each of the models is given in the right hand column of Tables 1 and 2. These objectives all refer to the attainment of certain skills, attitudes, or knowledge for which the model has demonstrated effectiveness.

Research-Based Models of Staff Development

Gall & Vojtec (1994) present six research-based models of staff development (summarized in Table 1) with specific attention to the objectives which each model best addresses. This classification does not preclude the possibility of integrating different models. Gall and Vojtec, however, provide no reference to the nature of either teaching or faculty development that would suggest a theory for organizing these empirical entities.

Each of the six models presented in Table 1 possesses features which help to distinguish it from the other models and is well suited to specific objectives. For example, The Expert-Presenter Model is characterized by teachers listening to an expert lecture about a particular topic. This model works well to develop teachers' knowledge and understanding. The Skill-Training Model is distinguished by the presentation of theory behind a skill by an expert, as well as an explanation and modeling of the skill itself. This model works well to enhance instructional skills and strategies.

The first four models are competency oriented and do not include an element of social learning. From the Expert-Presenter model through to the Action-Research Model there is a progression in the amount of autonomy which the teacher can exercise in his or her own

Table 1

Six Research-Based Models of Staff Development

Model	Key Features	Objectives
1. Expert-Presenter	Teachers listen to an expert lecture about a topic.	Development of teachers' knowledge and understanding.
2. Clinical Supervision	A supervisor, mentor, or coach works with the teacher to identify the teacher's goals and concerns, collects appropriate classroom data, reviews data and teacher's decisions with the teacher.	Development of teachers' instructional skills and strategies.
3. Skill-Training	Expert trainer presents the theory behind the skills, explains and models the skills. Teachers practice the skills and receive feedback and are coached to promote transfer of training to their own classrooms.	Development of (a) teachers' instructional skills and strategies, (b) teachers' ability to improve the academic achievement of students, (c) teachers' ability to develop and implement curriculum, (d) teachers' ability to reflect and make sound judgments.
4. Action-Research	Teachers, alone or with assistance, do research in their own setting to answer their questions or to test new ideas.	Changing teachers' attitudes. Development of teachers' ability to engage in school restructuring.
5. Organization Development	An Organization-Development specialist helps teachers and other staff to diagnose strengths and weaknesses of their school or system, develop a plan, and evaluate its success.	Changing teachers' attitudes. Development of teachers' ability to develop and implement curriculum.
6. Change-Process	Staff developers help teachers to make decisions to adopt a system-wide innovation, put the innovation into practice, and then institutionalize it.	Development of teachers' ability to engage in school restructuring.

Note Adapted from Gall & Vojtec (1994).

development. Nevertheless, this increasing autonomy does not substitute for dialogue about central purposes of teaching and teaching approaches with colleagues. According to my framework, these models would have to be modified to accommodate the social practice view and performance orientation to be considered effective faculty development initiatives. Mistakenly, the literature in professional development seems to betray a bias for believing that increased autonomy leads to increased effectiveness. What is misleading about this sometimes subtle undercurrent is that it focuses attention on a single factor. We therefore miss discovering the full implications of the interconnectedness and social norms brought out in the social practice/performance orientation model.

Faculty Development Models From Medical Education

To the list of models from staff development in public education found in Table 1 can be added other models which are more commonly found in medical education (Hitchcock, Stritter & Bland, 1993). Table 2 outlines some of these formal programs of faculty development. These models add to my framework for looking at faculty development.

Fellowships and Centres are essentially Short Programs organized in different ways. Although not specifically mentioned in the literature, fellowships promote exchanges about teaching among faculty. Otherwise, these models have only a competency orientation without taking into account the influence of the social norms of teaching on faculty. Evaluation systems have the potential to make improvements if the information about one's teaching is shared with others in an effort to make positive changes (Murray, 1997). As the reader will notice in Chapter IV, I decided not to study evaluation systems, but concentrated on short programs, one of the most prevalent forms of faculty development used in medical education (Hitchcock, Stritter & Bland,1993). The reason for this had to do with the client system in which I was working and could not have been postulated as a delimitation prior to the study beginning. Finally I examine some factors that have been identified by researchers which contribute to the success of faculty development programs.

Table 2

Four Faculty Development Models From Medical Education

Model	Key Features	Objectives
Fellowships	Extended (12 to 24 months), formal, post-residency training.	Development of knowledge and understanding. Development of instructional skills and strategies. Increased ability to develop and implement curriculum. Development of ability to reflect and make sound judgments.
Evaluation Systems	Providing valid information to faculty about their teaching from students, peers, and supervisors.	Development of instructional skills and strategies.
Centres	Comprehensive, regionally or nationally organized centres using a variety of formats (models).	Development of instructional skills and strategies. Development of knowledge and understanding. Development of ability to shape and implement curriculum.
Short Programs (Seminars and workshops)	Expert trainer presents theory behind the skills, explains and models the skills. Faculty members practice skills and receive feedback and is coached to promote transfer of training to his or her own teaching situation.	Development of instructional skills and strategies. Development of ability to shape and implement curriculum.

Note Adapted from Hitchcock, Stritter & Bland, (1993)

Some Generalizations About Successful Faculty Development Programs

There are many characteristics reported in the literature which have been identified as leading to the success of faculty development efforts. Listed below are some factors adduced

from the reflections of program evaluators, staff (Eble & McKeachie,1983, pp. 216-217), and researchers (Weimer, 1990):

1. They offered some choice within a focused plan or theme;

2. They were sensitive to time pressures inviting greater investment but not demanding a heavier workload;

3. They provided assistance in acquiring new skills, not just exhortations; and

4. The program took risks by challenging faculty to stretch their thinking beyond their own professional growth to include considerations of the impact on students and the institution.

Workshops. There are several advantages to on-site workshops. These provide more extensive and ongoing training for large numbers of faculty than do national meetings and conferences (Eison & Stevens, 1995; Skeff, Stratos, Berman & Bergen,1992). They provide appropriate models in active learning approaches (Skeff et al, 1992) and help establish an organizational culture that encourages and supports efforts to improve teaching (Weimer, 1990).

Needs assessments. The key point identified in the literature for planning faculty development opportunities is the necessity of determining faculty needs. Programs must be thoroughly planned and well prepared (Eble & McKeachie,1983). The conduct of a needs assessment survey is an essential component of planning any faculty development program and is widely recommended (Hitchcock, Stritter, & Bland, 1993; and Steinert, 1993). Bland (1980) along with DaRosa, Folse, Sachdeva, Dunnington, and Reznick (1995) note the importance of the needs assessment before planning any course or curriculum which involves faculty as learners. An accurate identification of the needs of faculty increases the likelihood that the learning opportunity will be relevant and realistic. Answers to questions about which faculty development programs are appropriate may only be answered by understanding the needs of faculty.

Needs assessments can be managed through a variety of sources and methods (Bland, 1980). A determination of the needs of faculty can be made by (a) asking the potential participants themselves through interviews, questionnaires, or focus groups; (b) relying on outside observers, (c) conducting a task analysis, and (d) reviewing the relevant literature dealing with both teaching and faculty development. Using several sources of data can enrich the

interpretations and planning which follow. Although a well constructed and considered needs assessment does not guarantee success in faculty development, it is the first and necessary step in the process of planning for faculty development.

Implementation. Eble and McKeachie (1983) and Weimer (1990) have identified those factors which lead to the long term success of faculty development programs.

1. They had effective participatory leadership;

2. There were substantial numbers of faculty involved in the planning;

3. Programs were not initiated in a way that increased faculty insecurity;

4. All faculty were given opportunities to improve and were valued for their contributions. Programs were not aimed at "deadwood" or those identified as ineffective;

5. They stimulated enthusiasm and high participation rates;

6. They changed the organization so there was more collegial and administrative support for teaching;

7. They had a high and respected profile;

8. The results were tangible changes in curricula, courses, teaching strategies and such practical educational activities; and

9. There was increased interaction and collaboration among faculty and students. In some cases a better climate for teaching and learning was established with increased commitment to teaching with teaching improvement becoming the norm.

This list of characteristics will be useful when establishing or evaluating faculty development programs. In Chapter IV, I use these to draw attention to important characteristics of the faculty development programs which were in this study.

Conclusion to Considerations for Faculty Development Programs

A great deal of the empirical and theoretical research in faculty development is decontextualized (Hitchcock, Stritter and Bland, 1993; Eble and McKeachie, 1983). The descriptions are quite broad and indefinite with little sense of priority so that they are sometimes

impractical. Although this review of the literature has identified some guidelines for successful faculty development, it is not known with certainty how they are to be applied in specific settings. The key to a successful faculty development program is to find the correct mix of developmental activities and programs which are best suited to a particular situation (Guskey, 1995). This highlights the importance of a careful and thorough needs assessment as well as other participatory mechanisms which will provide guidance to customize a faculty development program.

The purpose of this study was to learn more about this optimal mix in faculty development through an action research methodology in a specific medical school setting. Thus far in this chapter I have set out three elements of my framework for thinking about faculty development. They are teaching as a social practice, both competency and performance orientations, and characteristics of successful programs. I will now complete the framework by formulating the component concerned with organizational and social supports.

Organizational And Social Supports For Faculty Development

Organizational and social supports are important for introducing and implementing programs of faculty development. These supports are also important for contributing concurrently to the success of individual programs by creating a climate which allows and encourages individuals and groups of faculty to improve their teaching practices. Neither faculty developers by themselves nor administrators on their own can influence the creation and maintenance of an environment that fosters support and rewards teaching (Sorcinelli & Aitken, 1995). A focus on organizational supports draws attention to those who can influence the elements in the environment which interact with initiatives aimed at individuals to enhance professional growth. I therefore discuss in this section both the need for, and the sources of, institutional support found in higher education settings.

Need for Institutional Support

Hitchcock, Stritter and Bland (1993) found that the institutional environment was becoming a focus of theorizing about faculty development. They recommend interventions to change the environment in which faculty work. These might be organizational development, curricular reform, clerical support, research assistance, and reward systems, since, as they write, "Interventions focused on changing individual faculty members often fail to make a difference because faculty return to the same institutional environment" (p. 307). Their concerns about the transfer of learning to the workplace touch on the issues raised in the discussions about teaching as a social practice and a performance orientation made earlier in this chapter.

The organizational environment is an important consideration in establishing faculty development programs. The research indicates that a wide variety of approaches work well in different situations (Weimer, 1990): "A shared sense of institutional identity plays a key role in determining how we respond to new initiatives" (p.169). Furthermore, Weimer (1990) and Eble and McKeachie (1983) recommend that institutions work to create and maintain organizational environments which support and encourage the deliberate and systematic quest for instructional quality.

Owens (1995) sets out a model of organizational climate which is instructive to our purposes at this point. He articulates a model in which there are four components of climate: culture, milieu, ecology, and administration. The element "culture" is of most concern to this study. It refers to the norms and beliefs which are practiced and acted on at any one site or the collection of interrelated roles and patterns of behaviour make up the culture. It is "the way things are done around here" ; it is the social norms of the group. This element of climate is an important target for leadership as earlier emphasized when discussing teaching as a social practice. Changing the beliefs and norms which teachers have is a key to effective improvement in teaching (Little, 1981; Overgaard, 1994) and can be accomplished by efforts on the part of faculty leaders, both formal and informal.

Bland and Holloway (1995) point to the need for medical schools to articulate a more focused vision as part of the institutional culture which "can guide the allocation of pooled resources and inspire faculty to arrange their activities to accomplish the vision collectively" (p.

34). Astin and Chang (1995) report that institutions which place a high priority on student development and the teaching role of faculty tend to have a generally positive impact on undergraduate student learning. Conversely, they also note that institutions with a heavy emphasis on research generally have a negative impact on student outcomes. The deciding factor which makes institutions high in both research and student orientations is "institutional will, policy and tradition" (p.49). Social norms are powerful guides for professional practice.

This need for leadership is echoed by Lucas (1994), Seldin (1990), Rice and Austin (1990), and Green (1990). Seldin proposes that individual initiatives in teaching improvement will be ineffective in the long term unless the cultural environment is changed first: "To bring a new professionalism to teaching requires action and a campus climate that supports and rewards effective teaching, placing it on an equal status level with scholarly research and publication" (p. 8). He suggests that we need to change the campus climate to make it more responsive to teaching. This, he points out, does not occur from one magnificent initiative, but is a painstaking administrative undertaking which might include counting teaching in tenure and salary decisions, raising the status of teaching, encouraging research activities to feed back into better teaching, keeping faculty current on issues about effective teaching, periodic review of instructional programs and curricula, studied use of student evaluations, and a comprehensive program to support instructional development. Rice and Austin (1990) similarly note that universities which have truly made teaching an organizational priority find ways to give teaching considerations a prominent place. Bland and Holloway (1995) report that several medical schools have changed their tenure systems to emphasize teaching and require quality documentation of teaching effectiveness through peer review or dossiers. Organizational and social support for teaching is indeed a very important factor in the improvement of teaching and is being seriously considered by some institutions.

Sources of Institutional Support

There are a number of sources of leadership and support. I will examine the role of faculty, the department head and senior administrators, and the committees of faculty whose responsibility it is to promote effective teaching. It is important to identify these sources of

support in order to strengthen faculty development.

Faculty as sources of support in the institution. Sometimes faculty resist the initiatives and good ideas of administrators, regardless of the quality or the intentions (Green, 1990). It is necessary, therefore, to look to those faculty with an interest in teaching to take on informal leadership roles (Sorcinelli & Aitken, 1995). Engaging faculty members in the challenge of supporting teaching can often have a greater and more positive effect than formal, hierarchically sanctioned decrees.

Department heads and administrators as sources of support. Senior administrators and chairs of departments can provide the kind of effective leadership required to make the organizational climate more conducive to the improvement of teaching (Rice & Austin, 1990). Many writers give specific attention to department chairs (Lucas, 1994). Bland and Holloway (1995) comment that since most of the decisions occur at the department level, departments must refine and refocus their mission and vision statement which clearly ties them to the larger mission of the whole institution. Lucas (1990) identifies the department chair as a potential change agent in the process of building a culture and organizational climate conducive to teaching improvement. Her ideas for fostering effective teaching parallel those of other writers and include (a) making teaching effectiveness a high departmental priority, (b) creating a climate of trust and support, (c) rewarding good teaching, (d) using student evaluations, and (e) setting up collegial support and assistance programs. Tucker (1984) also recommends a cooperative effort among faculty, department heads and administrators, as well as institutionalizing the faculty development efforts. Cresswell, Wheeler, Seagren, Egly, and Beyer (1990) write that it is the department chair's responsibility to create a positive interpersonal work environment primarily by establishing an open atmosphere which builds trust. The literature makes it clear that the department chair plays a key role and can exert considerable influence at the department and college levels. One area in which this leadership is most needed is in faculty development. Tucker (1984) writes, "The case can be made that the department chairperson's most important function is to foster the growth and development of faculty and staff members within the department" (p.121).

Committees of faculty as sources of support. Many institutions involve faculty committees in instructional and faculty development programs and activities (Weimer, 1990). A survey of

colleges and universities found that committees of this sort contributed to instructional development in four principal ways. They would (a) advise, (b) participate, (c) evaluate, and (d) advocate. As advisors they suggested topics, approaches, and ideas which kept program developers and leaders close to the issues and concerns of the teaching faculty. Members of some of these committees also participated in learning about teaching, thus setting examples for other faculty. They were in a good position to evaluate the programs to increase the impact of what they were trying to accomplish. As advocates, their endorsement often carried more weight with other faculty than that of the program directors.

To faculty committees which advise on faculty development programs, Weimer (1990) suggests that they take the long view and work with the culture of their institution instead of trying a short cut (which does not exist) for the complex and diverse processes of both teaching and improving teaching. "Be patient!" is the crux of her advise.

Organizational and Social Support for Faculty Development: Conclusion

Organizational and social support for faculty development is a crucial companion to the work of faculty development and its very existence. In the pursuit of teaching effectiveness, leadership needs to be exercised to create, build, and maintain institutional support for teaching and for the improvement of teaching through faculty development. There are several sources of such support, all of which have a role to play in the enterprise of working to help faculty become better teachers.

A Framework for Thinking About Faculty Development

In this chapter I presented a synthesis of selected works from the literature on faculty development to outline and justify a framework I have used to think about faculty development. The framework I propose includes several important considerations. First, the nature of teaching leads us to favour the social practice model of teaching over other competing models. The main

implication for faculty development is providing opportunities for faculty to talk about and modify their practice of teaching in light of the purposes of teaching. Second, focusing efforts on performance, rather than the acquisition of competencies alone, is more effective faculty development. Third, characteristics of successful faculty development programs were described in this chapter including the importance of a comprehensive needs assessment and considerations for careful implementation. Fourth, an organizational and social environment needs to be created and maintained which supports faculty in improving their teaching practices.

Figure 2 provides a graphic representation of the relationships among the different components of the framework I have advanced. The four main factors identified in this review of the literature are numbered from one to four: (1)social practice, (2)performance orientation,

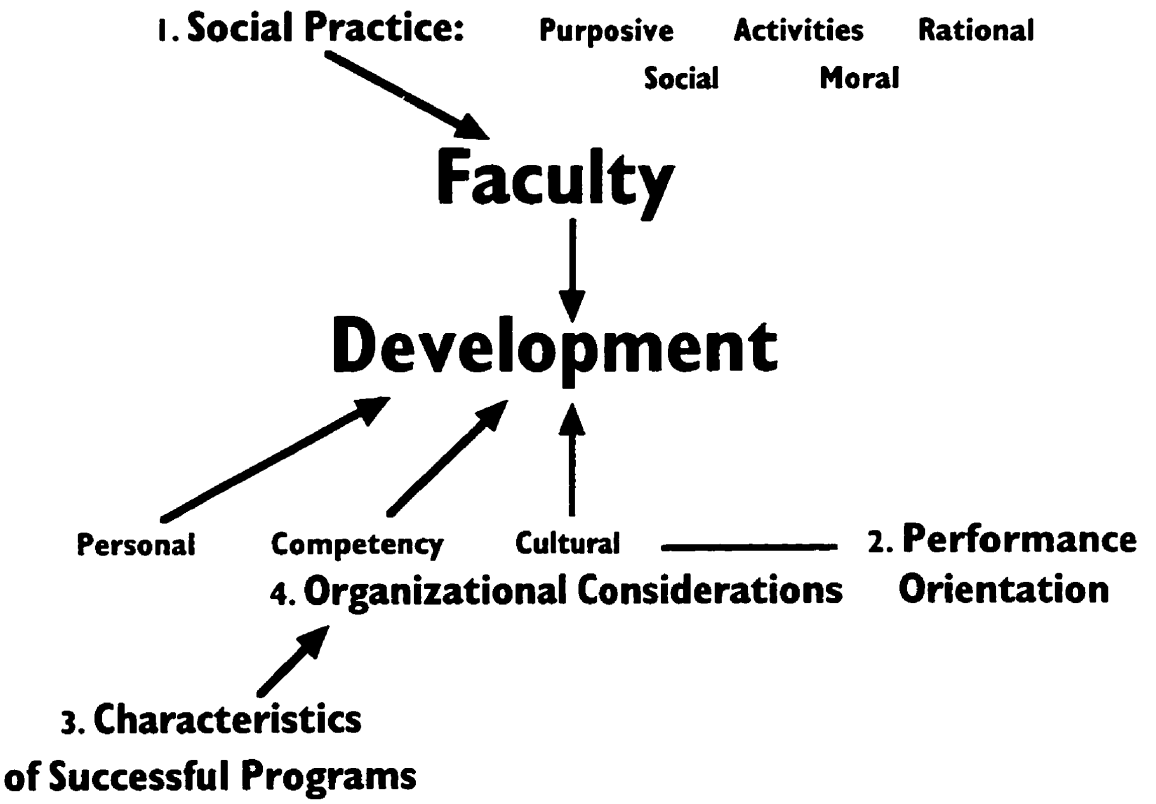

Figure 2: A framework for thinking about faculty development.

(3) characteristics of successful programs, and (4) organizational considerations. Notions of teaching as a social practice inform the thinking about what faculty do and the influences on their behaviour. This, in turn, has implications for the developmental programs which are planned and implemented. The design of these developmental programs is also informed by considerations of performance which include personal, competency, and cultural factors. The competency factor to performance if influenced by the empirical research which points to successful programs in the past. These then stand as exemplars for other faculty development programs. The organizational and social considerations, prominent in the social practice model and the considerations of performance, is given a place as the fourth component in the framework.

It should be noted that the personal factor influencing performance has not been included in this study as noted among other delimitations set out in Chapter I. Although it is an important part of performance considerations, this factor was not included in the research questions. The assumption was made that this factor was being adequately attended to by employee assistance programs and other forms of personal support already in place at the research site. I do not deny that this aspect of faculty development should and could be studied. I have decided not to pursue it at this time in favour of trying to get directly at improved teaching performance.

CHAPTER III
METHODOLOGICAL CONSIDERATIONS

The purpose of this study was to learn more about faculty development through an action research approach in a medical school setting. In this chapter I take a critical look at action research. I explain what it is and provide some rationale for the particular type of action research I selected for my study. Through a discussion of the scientific claims of action research I build confidence in action research as a sound methodological approach. I then compare action research and evaluation to justify my use of certain evaluation practices in this study. In the last section I introduce my research site, the College of Medicine of the University of Saskatchewan, and describe the specific methodology that I employed.

Action Research as Process

Action research is a process of learning about the world. More specifically, it is a research methodology that weds rigour with real-life settings to arrive at both benefit to those involved and knowledge for those so concerned. In this section I explore the varieties of action research models and choose one most suited to the purposes and situation of this study.

Choosing a Specific Action Research Protocol

There are numerous models of action research, each with its own distinct focus and advantages. Deciding to use an action research approach in this study did not end the deliberations about methodology. I needed to select a particular type of action research. To explain the choice that I made, I first provide a historical overview of action research and then

examine some contemporary models. I will conclude by presenting the action research protocol that I used in this study.

Historical Roots of Action Research

There are various forms of action research practised and reported: (a) action research (Carr & Kemmis, 1986), (b) participatory action research (Greenwood, Whyte & Harkavy, 1993), (c) experiential inquiry (Feldman, 1986; Kolb, 1983), (d) action science (Argyris & Schon, 1989; Argyris, Putnam & McLean Smith, 1989), (e) transformative research (Beder, 1991; Deshler & Selener, 1991), and (f) collaborative inquiry and action inquiry (Reason, 1994). The presence of such variety poses some problems for the prospective action researcher needing to make a choice of approach. I will show the essential characteristics of action research and then provide a reason for my choice from among the different types available.

The term, "action research," was putatively coined by John Collier, U.S. Commissioner of Indian Affairs from 1933 until 1945. He used the words 'action research' in an article in 1945 to describe the process by which agents of the Bureau of Indian Affairs worked collaboratively with representatives of Indian tribes to plan and initiate change (Stone, 1980). This origin is disputed by Kemmis (1988) who states that the term was coined by Lewin around 1944 (p. 42). Nevertheless, whatever the origin of the term, it is Lewin who is generally thought to be responsible for the rise to prominence of action research (Elden & Chisholm, 1993; Aguinis, 1993).

Eizenberg (1991) summarizes Lewin's formulation of action research as "research (usually by practitioners) into (their own) practice, aimed at its improvement" (p. 179; parentheses in the original) and " a small-scale intervention in the functioning of the real world and a close examination of the effects of such intervention" (p. 181). Stone (1980) writes that Lewin's view included doing a basic conceptual analysis then undertaking a systematic investigation, and finally carrying out a change experiment. Lewin was also concerned about being collaborative and involving participants in decisions about research which affected them (Marrow, 1977).

Lewin's action research is modelled as an iterative learning cycle of four overlapping stages (Stone, 1990).

1. The Acting Stage involves participation in a real experience, usually the intervention designed to change the system.

2. The Observing Stage includes observations and reflections.

3. The Reflecting Stage refers to the formation of abstract conceptualizations and generalizations which may be suitable for other environments as well.

4. The Planning Stage means the testing of the implications of previous stages in a new situation through a new intervention.

All models of action research, in various forms and with various modifications, contain these essential stages. The order may be changed or the names different, but the core stages remain the same.

Contemporary Models of Action Research

There are many forms of action research presently practised and described in the literature. I present four of them and distil from them other essential features of action research. Bryman (1989) characterizes action research as (a) an iterative problem-solving process, (b) the making of contributions to understanding and knowledge and (c) the maintenance of a participatory climate. He summarizes action research as a type of applied social research that is distinguished by the special relationship of the researcher and subjects. The researcher and the client "collaborate in the development of a diagnosis of and solution for a problem, whereby the ensuing findings will contribute to the stock of knowledge in a particular empirical domain" (p. 178). Bryman emphasizes that the participatory nature of action research means that the researcher's responsibility is not only to the senior management team but, as well, to the rank and file, the workers. Bryman's model is essentially the same as Lewin's.

Second, Carr and Kemmis (1986) define action research as a self-reflective spiral of "controlled intervention and practical judgment conducted by individuals and groups committed not only to understanding the world but to changing it" (p. 186). They, like Lewin, have four essential phases: (a) planning, (b) taking action, (c) observing the effects of the action taken, and (d) reflecting on the meaning and implications of the cycle with a view to further planning, acting, observing and reflecting.

Third, Argyris and Schon (1989) draw a distinction between action research and participatory action research. Action research, they write, works from the perceptions of the practitioners in local contexts, builds descriptions within that context, and sets up intervention experiments that test the hypotheses and effect some change. Participatory action research, they argue, is a form of action research that involves the practitioners as both subjects and coresearchers. It is based on Lewin's proposition that the humans affected by the change be involved in the process of building and testing causal inferences about human behaviour (Marrow, 1977). Participatory action research creates the conditions in the community for giving and getting valid information, making free and informed choices and generating internal commitment to the consequences of the intervention (p. 613).

The fourth contemporary model of action research that I present comes from Stone (1980). He describes action research as a cooperative systematic study similar to that of Lewin's conceptualization of action research, but adds one step which begins the four-stage cycle:

1. Finding a problem;
2. Planning the resolution of the problem;
3. Implementing the plan;
4. Assessing the impact of the plan by evaluating the changes that occur; and
5. Before beginning the cycle, the effectiveness of the group process is assessed.

Stone's (1980) iteration of action research includes Lewin's classic stages of plan, act, observe, and reflect. The important additions are the initial problem finding stage and reflecting on the effectiveness of the action research process itself. In this study I did conduct some initial research which was designed to find a suitable problem and I devoted one chapter to reflecting on the study itself.

As I shall demonstrate later in this chapter, the problem finding stage suggested by Stone (1980) is very similar to the evaluation of context that is recommended in the evaluation literature. It was Stone and my reading of the evaluation literature which influenced me to make "observing" the beginning stage of my model of action research. Though the model shown in figure 3 and throughout the dissertation is my own creation, it was adapted from the work of other theorists,

Stone (1980) in particular.

Action Research Defined for This Study

For the above reasons I decided to rely on Stone's version of action research for guidance in conducting the study. Although the other models would have been acceptable, since they all conform closely to the essential characteristics of action research, Stone's version offered me more.

Figure 3 shows the four repeating stages beginning with observing, and progressing through reflecting, planning, and acting and continuing indefinitely. This figure will be used many times throughout this dissertation to help orient the reader in understanding which stage of the action research cycle I am describing. Notice that the stages repeat themselves. This was true of this study as well. Reporting what has happened up to this point in the study may give the impression that the action research has ended. In fact, it continues, and may continue in some form indefinitely. Furthermore, the cycles of action research were started before my arrival at the research site.

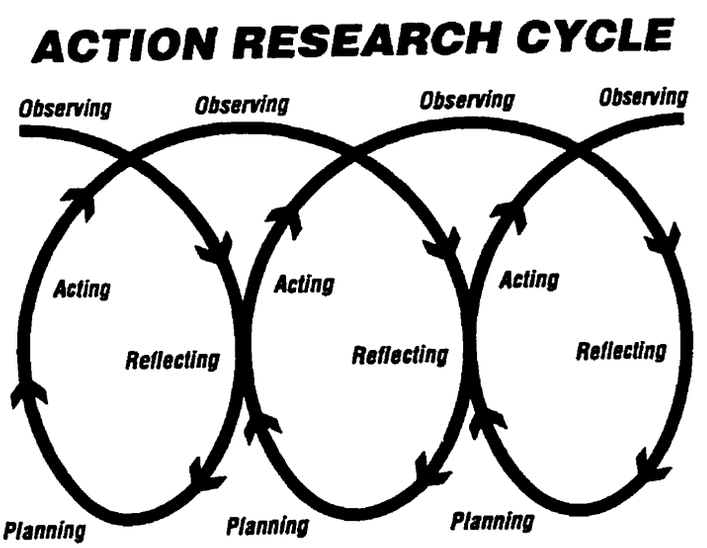

Figure 3. A representation of the iterative action research cycles beginning with Observing.

Figure 3 portrays neatly what was in reality a non-linear and messy process. I was involved in several stages at one time and recycled through the same stage more than once. The length of time spent on each stage was never the same, and stages were not of similar duration as shown in the diagram. Though I have explained the study to give a refined appearance, it was a complex, and sometimes confusing, process. The observing stage is portrayed here to be longer than the others. This was partly a graphic accommodation and a point that needs to be made about the importance of a thorough preparation and preliminary, problem-setting stage.

Having explained what exactly I mean by action research, I turn now to an examination of the scientific claims of action research. The central question is, "can action research help us learn about faculty development?"

Scientific Claims of Action Research

The scientific claims of action research are based on ontological, epistemological and methodological considerations. According to Stone (1980), the fundamental assumptions of a philosophy of action which undergirds action research are (a) ontological, that human agents act in the world, (b) epistemological, that they have an idea of how to act in the world and (c) methodological, that by putting those ideas into effect the action researcher can induce change in the world and learn about some empirical area.

> (The philosophy of action's) primary assumption has to be that there are human agents, either individuals or groups, who can act in the world. If we are simply determined by the environment and manipulated by external events, then action research is nonsense. As action researchers, we must also make the premise that each agent in an active process has a conceptual map of symbols that refer to the non-symbolic world, and that each of their maps is at least partly valid. Finally, we will need to claim that by manipulating these symbols, such as making, articulating and implementing decisions to act, agents can affect the non-symbolic world and are able to recognize and act in light of the impact that they have made. (Stone, 1980, p. 11)

The first assumption outlined by Stone (1980) concerns the ontological status of the social world; the nature of the reality we experience. The second deals with issues of validity and will be treated under a section on epistemology; how we know that we know anything at all. The third assumption is all about methodology; acting in the world in a systematic way to tease out

information that will be useful to us.

Ontology

The ontological debate relates to the nature of reality, specifically the social reality in which this study took place and which it tried to understand. In this section I explain the foundational claims of action research as justification for using that methodology in the study.

Objective-Subjective Controversy

The objective view of the social sciences treats human beings as actors without purpose in a world which imposes itself on individuals (Burrell & Morgan, 1979). The objective view is deterministic. Individuals are constrained by situational factors in the environment and the culture. The subjective view, on the other hand, claims the purposefulness of human actions apart from objective constraints (Jansen & Peshkin, 1992). The subjective view holds that people are voluntaristic or self-determining, free-willed and autonomous (Burrell & Morgan, 1979). These two views can be thought of as opposed sociological paradigms.

Vygotsky's socio-historical psychology. Vygotsky's socio-historical psychology demonstrates a unity between these two otherwise contrasting views, but it does not declare a strict identity of the two (Blanck, 1990). According to Vygotsky, these two are related but are not the same. Vygotsky proposes that social reality is both "in the mind" and "in the world," both a product of human consciousness and a force that acts on individuals, both purposeful and framed by an objective world out there. Humans are both autonomous and constrained; they are guided by their own consciousness and that consciousness has been formed in the first part through sociality. Humans are neither fully autonomous nor slavishly constrained. Cultural meanings and values have been embedded into individual consciousness, creating a psychologically regulated conformity. Vygotsky's theory postulates a mechanism by which both polarities of the objective-subjective continuum are shown to be integral parts of the whole human social and psychological experience (Ratner, 1991; Vygotsky,1978)

The Sociology of knowledge. Berger and Luckmann (1966) write about what is known as the sociology of knowledge, a concept similar to Vygotsky's as outlined above. They postulate that there is a social reality in which actors move and interact. It is socially constructed but it has been internalized through an acculturation process that transforms the individuals. A correspondence between the perceptions and theories of the real people making their way in the world and an objective social reality can be expressed in a hypothesis and tested in action (Argyris, Putnam & McLean Smith, 1985; Herron, 1988). It is this ontological formulation which warrants a philosophy of action, an action research approach to discovering truth.

Epistemology

Epistemology is the study of the nature, scope and reliability of claims to knowledge (Walker & Evers, 1988). The structure of justification embodied in epistemic principles determines a great deal of the overall framework for theorizing in educational administration. "What epistemology counts as satisfactory justification imposes powerful constraints on the content and structure of administrative theory" (Evers & Lakomski, 1991, p. 3). A sound epistemological basis for action research is of paramount importance if action research is to be considered an appropriate research model to produce sanctioned knowledge.

Tested in Reality

The foundational epistemic claim of action research is that hypotheses are rigorously tested by applying them to the situations for which the action was planned. After careful observations and reflection, conclusions are drawn regarding the effectiveness of the changes that were implemented. Plans are made for the subsequent action based on increased understanding of the situation. "It is action which is considered and consciously theorized, and which may reflexively inform and transform the theory which informed it" (Carr & Kemmis, 1986, p. 190).

Evaluators have found that a well researched and highly accurate, more objective

evaluation may not be used, or used only minimally, but a report that is more congruent with and responsive to the organization, that is perhaps less original and objective, usually results in greater use. "It (responsive evaluation) is an approach that trades off some measurement precision in order to increase the usefulness of the findings to persons in and around the program" (Stake, 1975, p.14). More rigorous studies may be less relevant and more relevant research may be less rigorous (Brinkerhoff, Brethower, Hluchyj & Nowakowski, 1983; (Lippitt, 1968). Important questions often take place in the context of real life. To reduce these questions to more manageable constructs for the purpose of increasing objectivity and certainty may actually render the knowledge unusable or irrelevant. Patton (1980) advocates "pragmatic validation" of evaluation results through a mechanism which has practical utility and credibility (including accuracy, validity, and common-sense truthfulness). Weiss (1972) argues that neither distanced objectivity nor neutral rationality would contribute to the utilisation of evaluation research by decision makers.

> In human inquiry it is better to be approximately right than precisely wrong. It is also better to initiate and conduct inquiry into important questions of human conduct with a degree of acknowledged bias and imprecision, than to bog the whole thing down in attempts to be prematurely 'correct' or 'accurate.' (Reason, 1988, p. 229)

Action research takes place in real settings. Reason (1988) makes the point that it is more important for the information to be timely and pertinent than objective and completely certain. If action research is to make changes in the world, then it needs to produce information on which decision makers are able to act.

This claim about the importance of being approximately right assumes an answer to the question of what constitutes scientific knowledge. Action research is an iterative experiential learning model with simultaneous concerns for change in the setting of the research and for contributions to scientific knowledge (Aguinis, 1993). The importance of being approximately right has appeal for the purpose of effecting change in the research setting. But, can action research in fact help create knowledge of more general usefulness? It is to this question that the next section is addressed.

The Knowledge Claims of Action Research

Does action research claim to discover absolute truths? The new philosophy of science recognizes that there are no absolute claims to knowledge (Evers & Lakomski, 1991; Fals-Borda, 1991; Phillips, 1987). All attempts to justify knowledge claims have proven to rest in an infinite regress on unjustifiable foundations. Popper's view is that knowledge can be proven false but not proven true (Phillips, 1987). "By testing a theory, what Popper is really talking about is attempts to refute it, or disconfirm it" (Evers & Lakomski, 1991, p. 35). A process of falsification is also the scientific programme of action research (Heron, 1988). Popper believes that his epistemology cannot be avoided if learning is to take place. Action research claims to advance learning experientially in a way consistent with the views of Popper, but makes no absolute claims to knowledge.

Evers and Lakomski (1991) also think that Popper is correct in that it is falsification that builds all knowledge. However they want to add to that statement a positive element of theory building and verification which might "explain the very powerful learning strategies of human 'epistemic engines'" (p. 37). In their view it is coherence which links up with falsification to direct the growth of knowledge. What Evers and Lakomski (1991) seem to be saying is that new theories are built from experiences that make sense. New information is integrated into existing knowledge structures in a way that is coherent (with existing cognitive schemata). From that point on, after the creative project is complete and the theory is advanced, it becomes justified when successive attempts to disconfirm or refute it fail and it yields predications which are shown to be accurate.

Action research is concerned with generating theories which correspond to the experienced world of the subjects of the research (Herron, 1988). These theories are relevant to the world of those who are participating in the research. The research questions are of a practical nature that will help the participants to live better lives, not just acquire more knowledge. The theories generated through an action research programme are coherent with the critically subjective knowledge of the participants in the study. These theories make sense to those involved. The theories are tested against reality and the results of the tests inform the theories that were tested. The theories are put into action, the results noted, and judgments are made

about the usefulness of the theory. In summary, with action research, we have confidence in what we think we have discovered because that knowledge makes sense to the participants and works in that situation.

Specific Methodology

Concerns about methodology centre around the approaches used to conduct research including collecting and analyzing data. I will introduce the specific methods I used in this study at the end of the chapter. I begin with a theoretical discussion.

Data Collection

Reason (1994) reports that there is a great discrepancy in the kinds of data that are admissible by the practitioners of the various approaches to action research. From formally reported records of conversations (action science) to rational verbal accounts of experience (collaborative inquiry) to song, dance and theatre (participatory action research), the kinds of data cross a vast range. Because action research involves the participants to such a high degree, as a methodology, it is more culturally sensitive, and hence, more diverse. There are great differences in the kinds of data collected due to the various degrees of reciprocity and co-researcher leadership of action research programmes.

Multiple Variables in Complex Environments

The real environments in which action research operates are complex. There are large numbers of factors which may bear on any particular aspect of a problem under investigation. It is very difficult to distil the effect of one or more isolated factors which operate in the research setting. How can action researchers say with confidence that the intervention that was planned and implemented was the agency which precipitated the observed changes? In this section I explore some answers to this question.

Action research has a lack of conventional rigour. First, I acknowledge the problem. Bryman (1989) critiques action research because it lacks conventional rigour on the basis of multivariate causality. His criticism focuses on the notion of the "sloppiness" of the environments of human organizations, the quasi-rational realm of "practice" in which valid and reliable learning is difficult (Feldman, 1986; Herron, 1988). Lippitt (1968) notes that Lewin was aware of this criticism and recounted his response:

> To represent and interpret faithfully the complexity of concrete reality situations requires continual crossing of the traditional boundaries of the social sciences rather than a progressive narrowing of attention to a limited number of variables. (p. 269)

Lewin's action research sought to integrate theory and practice by framing social science questions as the studies of real problems that were important to society. Really important problems take place in real life and to reduce them to more manageable constructs renders the knowledge unusable or irrelevant. More rigorous studies are less relevant and more relevant research may be less rigorous (Lippitt, 1968). Wisdom seeks solutions to important human problems through the application of knowledge; knowledge without action is inert and neutral. Therefore, action research is concerned with a philosophy of wisdom as opposed to a philosophy of knowledge (Reason, 1988, p. 3). Argyris (1993) would concur preferring the term "actionable knowledge" -- knowledge that can be used to make changes in human systems of interaction -- to the word "wisdom."

Action research improves information access. Feldman (1986) proposes a suggestion for dealing with an environment that is somewhat ambiguous to improve the probability of learning from experience. He suggests increasing both the amount and the saliency of information available in the system: "The challenge is to arrange the environment so that the learning task becomes more analytic, and the relevant cues and outcomes become salient and easily codable" (p. 281). He suggests that organizations make research a part of the decision-making process to minimize ambiguities. The regimen Feldman describes could easily pass for a version of action research:

> Action and evaluation should be linked, so that whether a decision is made quickly or not, its consequences may be evaluated, the basis for the decision considered, and the next decision made better. That is, after all, what learning is all about. (p.284)

Lewin himself saw action research as a form of rigorous social experiment and advocated the use

of precise measurements in the observation phase (Marrow, 1977). Action research, then, makes its knowledge claims based on the rigorous collection of data and testing of hypotheses (Kolb, 1983).

Hawthorne effect as a threat to data collection. What of a possible "Hawthorne effect" in action research that biases the outcomes in favour of the hypotheses because a participatory approach is taken? Might this lead to frivolous generalizations as at the Hawthorne Manufacturing Plant? Though theoretically possible, this is not likely. First, the kinds of practices which action research addresses are more complex than those susceptible to the Hawthorne effect. The participant subjects of the study will probably not be able to alter their behaviour at will. Argyris (1970, 1993) reports that, even when subjects knew which behaviour was targeted and had resolved to produce the desired behaviour, they were not able to do so and were quite frustrated by their failures. Second, the participatory nature of action research enjoins the subjects, through internal commitment, to provide useful information, that which is minimally distorted, in reporting and in behaving. The people working on the study are committed to finding real solutions to their problems and they are not going to be easily convinced in the efficacy of a bogus treatment or intervention. The possibility of the Hawthorne effect is perhaps greater in mechanistic, highly researcher-controlled research, than in action research. The subjects of more formal studies may try to please the researcher and thus distort the data. Argyris (1970) argues that subjects will tend to alter behaviour if the results are irrelevant or the data they are asked to provide are inconsequential. This changed behaviour is actually information distortion which the involvement and commitment of the subjects in important and relevant action research can actually guard against.

Avoiding distortions in information using action research. Argyris (1970) gives four methods that help to ensure the collection of minimally distorted information. First, he recommends the use of observed categories for describing behaviour as opposed to inferred categories. By this he means that data about behaviour needs to approximate the immediate empirical experience by the subjects themselves rather than inferences drawn from the data. Second, he counsels minimizing contradictory information about data collection. The participants may want to provide the information but may question the validity of the instrument. This is the reason that a wide variety of data collection methods is appropriate for action research. A

questionnaire would not be suitable in some settings and in others asking the elders may be the only valid way to collect information. Alternatively, the participant may be told that the research is important but the actions of the researcher or supervisors may indicate otherwise through an unwillingness to adapt the research instruments. Also, the subjects look to the researcher for consistency: "The more congruent his behaviour with words is, the more he will probably be trusted" (p. 112). Third, Argyris states that the diagnostic process needs to provide opportunities for the respondents to experience psychological success. He says the more that the data are reported in observed categories the more there will be a feeling of control and the greater the sense of control over the research activity the greater will be the flow of valid data. The participant can see the raw data for her/himself and decide if a change of practice is needed. This increase in the self-confidence of the subjects also serves to reduces the probability of dependence on the researcher. Finally, Argyris urges the use of several data collection techniques so that there will be a better chance of obtaining a match with participant preferences. He suggests interviews, questionnaires, and non-participant observations. In this way the participants can choose to represent themselves as they desire and in terms of their own dimensions (p. 114). Argyris believes that with less constraints acting on the situation the likelihood of valid information and willingness of the participants to believe and act on the diagnosis will be greater. These four recommendations promise to increase the chances of the action research intervention actually improving practice by promoting learning from experience through exposure to relevant and accurate data.

Studying oneself is highly subjective. Another objection to action research is that it is the study of oneself, one's practice, either individually or in a group. Therefore, the criticism is that the knowledge derived from action research is subjective and not worthwhile. Carr and Kemmis (1986) would certainly agree that action research is the study of one's own practice; action research is *praxis*, inquiry into practice as distinguished from inquiry into theoretical matters. Praxis tries to be effective not only by studying the action taken but also by scrutinizing the premises and assumptions which form the basis of the practice.

Carr and Kemmis insist that all inquiry is value laden and that a completely objective science, especially in the social sciences, is an illusion. They assert that the question is not about objective or subjective, but how subjective. Any study of *praxis*, they state must entail values and

interests. They also claim that the study of informed and committed action must always take place through the same kind of process, through *praxis*. *Praxis* is an iterative and reflective cycle whose goal is improved practice and through that to contribute to the general store of knowledge.

Their most potent argument in favour of action research is that the central purpose is to uncover biases and unsuccessful practices in the participants, including the researcher. This is done to build the theoretical foundation for more successful behaviours. Action researchers understand that they are going to learn and change through this process. In experiential learning the cognitive structures and schemata that no longer work well are scrutinized and new insights (associations etc.) are encoded with existing knowledge to form more reliable mechanisms for judgment. By definition the study of *praxis* is subjective but achieves, in a partial and tentative way, a correspondence with the quasi-rational world of human society. In *praxis*, subjectivity which is exposed to public scrutiny has the opportunity to become modified, and hence more objective. Shared experiences converge with the subjective perspectives of others. Individual impressions of events and beliefs about how to act in the world, through open disclosure, can be amended even at the level of basic assumptions and premises (Overgaard, 1994).

Confidence in action research. In spite of the difficulties of learning from experience, the many problems that confront the action researcher, learning does take place. For all of the reasons listed above, researchers can have confidence that action research is able to produce actionable knowledge (Argyris, 1993), knowledge that can be used to understand and change human social systems.

Action Research Compared to Traditional Scientific Research

Although I have tried to distinguish its scientific claims from those of more traditional research, action research and traditional research share many points in common. Certainly, Lewin's action research attracted people interested in social change, such as the American Jewish Congress (Marrow, 1977). But Lewin was also interested in the development of theory that could account for what is presently known and point the way to new knowledge. He had a simultaneous concern for changing the world and contributing to the advancement of scientific knowledge. This remains one of the essential features of action research today and a point of

commensurability between action research and traditional research (Whyte, Greenwood & Lazes, 1991).

Validity. The emphasis of both action research and traditional research on valid knowledge rather than private and highly subjective understandings of the world (Aguinis, 1993; Argyris, 1970; Argyris, Putnam & McLean Smith, 1985) means that philosophically they are both closely related. One of the goals of action research is the production of valid knowledge, knowledge which has referents to the actual world in which people function and which avoids "a rampant subjectivity" (Lather, 1991, p. 52).

To understand and to predict are two essential and preliminary goals of action research. In as much as traditional research can be thought of as the business of understanding and predicting (Lather, 1991), then action research encompasses and extends traditional research; it does not reject it. When Lather (1991), for example, states that the dual mission of emancipatory research is to elevate the lot of the researched and generate valid theoretical understandings, she is echoing Lewin who used the principles of science to find solutions to social problems, such as anti-Semitism (Aguinis, 1993). This places emancipatory research conceptually in conjunction with research methodologies whose aim is understanding and theory building. Furthermore, if action is engaged to change the life circumstances of the researched, then there must also be an element of prediction in the goals of emancipatory research. Participatory action research makes use of "explanatory scientific schema of cause and effect" (Fals-Borda, 1991, p. 8). This means that emancipatory research claims that one or another intervention will make a positive change in the lives of the participants. Action research, then, uses scientific methods which seek understanding and prediction and extends them into a philosophy of action by employing them to change human systems.

Researcher involvement. Traditional research differs from action research in that it separates the researcher from the researched (Reason, 1988). Action research compliments traditional research in precisely this way:

> Two unique features of AR (action research) are that the hypotheses are not generated only by the researchers but also by the organizational members, who take an active role in defining the problem and the goals of the intervention, and the purpose of AR is to generate not only general knowledge but also knowledge specific to the situation so that the conditions can be improved. (Aguinis, 1993, pp. 426-27).

Traditional research is extended in action research and the former is an epistemological foundation of the latter. Action research "is not an alternative to existing [traditional] social science but a way of dramatically enhancing our achievement of the goals of theoretical understanding and social betterment by widening the range of strategies at our disposal" (Whyte, Greenwood & Lazes, 1991, p. 54).

Action Research and Evaluation: Stronger Together

Now that I have described action research, I will demonstrate how action research and evaluation are comparable, complementary, and stronger when used together. I have, in fact, borrowed from program evaluation theory and practice to complete this study. In this section I justify what was essentially program evaluation in parts of an action research study.

This relationship between action research and evaluation was not widely acclaimed nor amplified but has now been well explained by Patton (1997). Stringer 's (1996) treatment of the relationship between evaluation and action research is under-developed even though he sees the essential match: "Evaluation is an intrinsic part of the action research cycle" (p. 138). Brinkerhoff, Brethower, Hluchyj & Nowakowski (1983) include action research as one relevant evaluation model in organizational development (p.41) but do not elaborate on what I consider to be some of the important likenesses. Huberman & Cox (1990) dismiss the connection entirely which seems to be based on a faulty conception of action research (pp. 172-173). This discovery and elaboration of the essential relationship between action research and evaluation is one of the significant contributions which this dissertation makes to the literature about which I elaborate further in Chapter VII.

Both action research and evaluation studies are ways of learning from experience. I begin with this essential and overarching similarity. Seen under this umbrella process, the unity of the two types of activities are more acutely compared and contrasted.

Action Research As Learning From Experience

The iterative self-reflective cycle of action research shares striking similarities with what cognitive psychologists call "learning from experience" (Feldman, 1986). In fact, one of the earliest proponents of what would eventually be called action research was John Dewey. He advocated an experiential learning model, a thinking process of problem solving and reflection (Stone, 1980). Dewey's five steps of reflective experience roughly parallel the action research model which I have adopted, although Dewey elaborated more on the problem-framing, reflection and planning stages than on the whole cycle of planning, acting, observing, and reflecting.

Feldman (1986) defines learning from experience as the situation "when an inaccuracy in prediction is made salient, and the resultant feedback is usefully encoded" (pp. 267-68). He further contends that previous experience in the form of culture and training has an effect on both the attention to stimuli and their interpretation which, in turn, defines the problem's context and the influence of feedback. It appears then, as Feldman indicates, that "what one learns is in part a function of what one already knows" (p. 266).

What one already knows is related to one's cognitive schema which Lord and Foti (1986) define as "highly structured, preexisting knowledge systems to interpret their organizational world and generate appropriate behaviours" (p. 21). These cognitive structures (a) guide attention, (b) bias memory to schema related behaviours and events, and (c) actually fill in the gaps left by incomplete observations. Gioia and Sims (1986) describe cognitive schema as coherent networks of thought, as mental structures which serve to organize knowledge in some systematic way. This implies a major role for trial-and-error learning since schema development is built from experiences, but also recognizes that trials are not randomly generated; they are based on previous learning and present cognitive structures. Both the recall of relevant associations and prototypes and the salience of stimuli may be affected by the environment and individual factors. Gioia (1986) suggests that cognitive structures provide for very efficient but not necessarily effective information processing.

The relationship between cognition and action is of particular interest to this discussion of action research and experiential learning. Gioia and Sims (1986) explain that there is a social cognitive basis for organizational behaviour. What they term "cognitive consensuality" (the way

individuals in a group think alike both in the sharing of meanings in organizational culture and the psychological similarity in which they process and perceive information) facilitates organizational action and makes organizations slow to change. Gioia (1986) underscores the close connection between cognition and action when he states that "one can neither understand nor alter organizational cognition or action without due consideration of the influence on the other" (p. 347). His recommendation for a two-pronged approach, cognition and action, is consistent with the action research protocol.

Exploring Evaluation

Another way of learning from experience is evaluation. Action research is one way to learn from experience. Both action research and evaluation can be compared as alternative, or perhaps complementary ways of learning from experience. Before explaining how that is true, I need to present a definition and examination of evaluation.

Evaluation Defined

For the purpose of this study and the comparison between action research and evaluation, I accept the definition of evaluation favoured by Scriven (1967,1991, 1994). Scriven proposes that evaluating is the process of determining the worth or value of entities. Stated less formally, evaluating is working out whether the thing is any good or not. Evaluations are then the end products of such a process.

Building on this definition, I am suggesting that evaluative research is a component of evaluation. Evaluative research involves the accumulation of data through direct or indirect observations. Comparing these data to a standard or benchmark is the analytical activity which makes a judgment of value possible and rational. If we accept Scriven's definition of evaluation we are not prevented from accepting the process of evaluation to be composed of the two complementary but theoretically separate activities of (a) conducting research and (b) making judgments. This distinction between evaluation research and making judgment is important when

comparing evaluation and action research.

Goals and Purposes of Evaluation

The goal of evaluation is to answer certain types of questions dealing with value or worth. As noted by Scriven (1967), "The activity (of evaluation) consists simply in the gathering and combining of performance data with a weighted set of goal scales to yield either comparative or numerical ratings, and in the justification of (a) the data gathering instrument, (b) the weightings, and (c) the selection of goals" (p. 40). In this explication Scriven himself distinguishes between one part of evaluation, the research activity (gathering of performance data) and another, the comparative or reflective activity (combining performance data with a weighted set of standards) leading to judgments of value or worth. To Scriven, evaluation is the process that includes both of these complementary sub-processes.

The purpose of evaluating is to facilitate change by helping those involved in the client system to learn about their problem or challenge. This central purpose defines the place and utility of evaluation in the wider context with the client organization. This central purposes is manifested in, but is not limited to, curriculum development, decisions about recommendations for purchase of materials, program improvement or continuance, or the promotion or reward of individuals, as well as covert considerations such as giving the impression of concern, assuaging workers or voters, or finding justification for decisions already made.

Increasingly evaluators are becoming concerned with realizing the legitimate purposes of their research (Huberman & Cox, 1990). Although the utilisation of evaluations would seem important to evaluators who believe that their work is of innate value, evaluations themselves are, nevertheless, still inherently evaluations even if they are never read or acted upon. In other words, an evaluation is an evaluation even if it does not produce some change for the better and fulfil its purpose.

Roles of the Evaluator in Making Judgments

Not all evaluation theorists or practitioners agree with or accept the definition of evaluation

advanced by Scriven (1994). They claim that evaluations do not need to include the making of a judgment. We might think of these evaluators as conducting evaluation research and then, to some extent, leaving the imputing of value to others, usually those in the organization. They are criticized by Scriven because, according to his definition, they are not evaluating, but are passing on the essential task of determining value to decision makers or stakeholders. Scriven believes that his avoidance stems from value-free conceptions of the social sciences (1994). What is at issue here is the role of the evaluator.

I reiterate the distinction between the goal of evaluation and its purpose. The goal is to render a judgment about the worth of an entity. There are two components: research and reflection. Scriven thinks that the evaluator is in the best position to complete both parts of the process (Stake, 1967). The purpose is to make some positive changes. The question I pose at this point is, "Must we accept Scriven's contention that the evaluator complete both parts of the evaluation?"

Evaluators assist decision-makers. In the CIPP (Context, Inputs, Process and Product) model developed primarily by Stufflebeam (Stufflebeam, Foley, Gephart, Guba, Hammond, Merriam, Provus,1971) the role of evaluators is to conduct investigations and make evaluative conclusions which would then assist decision makers. They take on the role of gathering the information and making the judgments consistent with Scriven's recommendation (Stake, 1967).

Evaluators use client's values. The Discrepancy Model, which was developed by Malcolm Provus (1972), advocates that the evaluator use the client's values as framework for the judgments of the evaluation (Scriven, 1994). Central to the discrepancy model is the attempt to forge a consensus of the interested parties around the standards against which the program is to be evaluated. Evaluators take the role of gathering information and then assisting the decision makers in determining value.

Evaluators produce thick descriptions. The approach to evaluation advanced by Robert Stake (1967, 1975) seeks to report only what has been observed to give proper attention to the purposes and perspectives of the client. The role of inferring value is left entirely to the client who, it is assumed in this model, knows better than the evaluator what the goals and aspirations of the organization are. Stake (1967) was concerned that, if evaluators took on the role of judge, their access to needed data would diminish. More importantly, he asserted that evaluators were ill-

equiped to infer the value of programs, and that evaluators did not generally trust themselves to discern what was best for a briefly-known community. The evaluator was urged simply to conduct research and produce thick descriptions which would then be passed on to the client for further reflection and discernment.

Evaluators guide and consult. An expanded role for evaluators is recommended in a utilisation approach. I am not sure that those who write in this area would approve of me classifying their ideas as a separate and distinct approach to evaluation. I have simply attached a name to this approach for the purposes of identification. I might also have called it a "consultancy" approach, but that describes an ill-defined activity rather than the purpose of evaluation. Patton calls it "developmental evaluation" (1997).

The role of the evaluator in the utilisation approach is enlarged through greater interaction between the evaluator and the client organization in the planning, implementation, analysis, judgment, and recommendation stages of the evaluation process (Huberman & Cox, 1990; Richardson, 1990) that goes beyond what Scriven (1994) considers to be evaluation. In addition, program development and program evaluation become blended processes and the evaluator takes up a role in the development or modification of the program which will eventually be evaluated (Talmage, 1975) or was just evaluated. The evaluator's role in the evaluation part of this new process is somewhat reduced because the client is expected to participate more fully in the evaluation.

> Thus the school/community members take on the tasks of implementing the program, evaluating the program, and holding its members accountable for carrying out the agreed upon responsibilities. (Talmage, 1975, p. 38)

The knowledge and perspectives of the clients are taken into consideration, as in responsive evaluation, to supplement the expert perspective of the evaluator (House, 1990). At every turn of the study, consideration is given primarily to the utilisation of the information (Patton, 1986). The evaluator comes closer to the client organization and the client organization is invited more into the world of the evaluator. The utilisation approach is a meeting of minds; not a one way process of learning (the evaluator learning about the client organization), but a two way channel such that the clients also learn about the evaluation as it unfolds. In learning about the evaluation the decision makers come to exercise greater control over the evaluation which leads to greater use

of the results of the evaluation (Huberman & Cox, 1990; Rutman & Mowbray, 1983). Huberman and Cox (1990) and Cousins and Leithwood (1986) report that the more interaction there is between the evaluator and the client organization, the more likely the evaluation will actually be used for its intended purpose. This provides ample reason for evaluators to maintain long-term and broad-based contact and involvement with the client group.

Expanding the Role of Evaluation

If the evaluator takes on the role of educator or consultant and maintains responsibility for the process but not necessarily the outcome of the evaluation, the main goal of evaluation can still be achieved in that the rendering of a judgment of worth of an entity is made. At the same time, the purpose of the evaluation can be better assured. Having explored the program and the organizational context thoroughly, the evaluator is in an excellent position to provide some guidance for decisions that need to be made concerning the development and implementation of recommendations. In the utilisation approach the evaluator and the decision-makers now share responsibilities for traditional functions in the developmental and evaluative processes and thus have carved out for themselves new roles and functions. Clients are now developers and evaluators; evaluators are educators, consultants, and developers. As Brunner & Guzman (1989) write, "evaluation should be a permanent participatory and educational process that depicts the progress of a development project, identifies its problems, documents its dynamism and helps the beneficiary groups and local facilitators to adjust their strategies in order to improve project practices" (p.). It seems that this approach to evaluation has a potential for increased use and fulfilment of the purpose of the evaluation.

Evaluation as Learning From Experience

From the preceding discussion about evaluation, I am able to make some inferences about evaluation as a way of learning from experience. This will link it closely to action research which is also one way of learning from experience.

Feldman (1986) wrote that learning from experience meant evaluating the consequences

of decisions and trying to make the next decision better. He recommended increasing the amount and visibility of information available to decision makers to increase the likelihood of learning taking place. This is what evaluation studies attempt to do. In particular, utilisation focussed evaluation seeks to fulfil the purpose of the evaluation, which is to make positive changes.

Gioia (1986) stated that learning from experience by organizations required both cognition and action. Evaluation engenders evaluation research that satisfies the cognitive element and the utilisation approach pays particular attention to the actual purpose of the evaluation, which is to act. Evaluation, utilisation focused evaluation especially, like action research, has the potential and the aim of helping people learn from experience.

Action Research and Evaluation: Further Comparisons

There are several striking parallels between action research and evaluation which highlight their essential similarities. Some of these bear emphasizing to be able to show how action research and evaluation can be combined. There are also some differences which must not be overlooked. Without these differences, there may not be the strengthening of the one by the other.

Similarities Between Action Research and Evaluation

One of the purposes of action research is to effect changes that will improve the situation at the research site. Evaluation utilisation is similarly concerned with the use of research. They both aim to make changes.

The processes of evaluation and action research also overlap. Evaluation is essentially half the action research method. Action research includes stages of observing, reflecting, planning, and acting in a cyclic, iterative regimen. Embedded within this regimen is evaluation disguised as observing (evaluative research) and reflecting (making judgments). Action research could be described as the process of evaluating, planning, acting, evaluating, planning, acting,

etc. Action research encompasses evaluating within its iterative cycle.

Participatory evaluation, like action research, is interested in action-oriented knowledge from the perspective of those who have a vital interest in the project. There is active participation in all aspects of the evaluation; it is designed for the decision-makers, and one of its goals is the independent functioning of the client group. As emphasized by Brunner & Guzman (1989), "Evaluation should be a permanent participatory and educational process that depicts the progress of a development project, identifies its problems, documents its dynamics, and helps the beneficiary groups and local facilitators to adjust their strategies in order to improve project practices" (p. 10). Participatory research can be a part of evaluation studies, as it is for action research.

Differences Between Action Research and Evaluation

Some reported differences are based on incorrect conceptions. Huberman and Cox (1990) specifically dismiss any similarities as insignificant.

> Conceptually, of course, formative evaluation is little more than a reheated version of the action research paradigm elaborated by Lewin and his colleagues in the early 1940's, but with a key difference: in Lewin's paradigm, it was the *researchers* who decided on the desirable changes and did it often times *before* making contact with the field. (p. 173)

This conception of action research is distorted. Even Lewin in his classical studies accepted the perspectives of the client. Any action researcher who calls herself by that name would claim to be client centred. Furthermore, it is a principle of modern action research to investigate the field first before attempting a change experiment. Lewin himself did not attempt change experiments without careful consideration of the research site. Whether formal or informal, Lewin's first steps in action research included gaining an understanding of the context in which the experiment was to take place, what we might more formally call a preliminary evaluation (Stone, 1980).

There are several real and notable differences between these two approaches to learning from experience which need to be surfaced. First, utilisation evaluation, in particular, is concerned only with the improvement of the local situation or program. Action research, on the other hand,

has equal concern for the intervention and for research that may be of benefit to a wider audience than the clients alone. This dual role for action research is a cause of one of the ethical dilemmas elaborated in Chapter VI.

Second, evaluators generally have more confined roles than action researchers, although I argued above that utilisation focused evaluation is advocating an expanded role for evaluators. Evaluation usually involves conducting research and reflecting on the information to arrive at judgments of worth. Action research involves these as well as planning improvements or new interventions and carrying them out. In this respect, action research is the more comprehensive strategy for program improvement.

Action Research and Other Action Oriented Social Sciences

I have integrated action research and evaluation in this study and provided a justification for that. However, I have not integrated action research with any of the other action oriented social sciences to which action research may show some similarities. I did not choose to pursue the relationships which exist among action research and other action oriented social sciences. I intend simply to point out some of the similarities between them and action research.

Policy Sciences

Policy research and analysis are quite similar to evaluation studies. In evaluation, the research is looking back to find guidance for future action. In policy sciences, the research is looking forward to find the necessary guidance (Chelimsky, 1985). The policy sciences are therefore related to action research in much the same way that action research and evaluation studies are related. Action research could be used, and has been used, to help make policy decisions (Stone, 1980). The cycle of observe, reflect, plan parallels the steps of policy research, namely, conduct an analysis, write the policy, and implement it.

Organizational Learning

Organizational learning means changes in what the organization knows and how it acts (Forss, Cracknell & Samset, 1994). It may mean critical scrutiny and modification of its basic objectives and goals, as well as the means to achieving them (Wildavsky, 1985). To Senge (1990) it includes the capacity for teams to act at least as intelligently as its individual members.

Forss, Cracknell and Samset (1994) conclude that participatory evaluation allowed organizations to learn how to do things efficiently but not necessarily to do the right things. Wildavsky (1985) suggests that continuous evaluation may be unnatural to the organization. "Organizational structure implies stability while the process of evaluation suggests change" (p. 248). The discussion of 'organizational consensuality' (Gioia and Sims, 1986) described earlier in this chapter, makes the same point. Real change for any organization is very difficult. If organizations fear evaluations, then it is because evaluations can make changes happen and threaten the status quo.

In that action research is a method of learning from experience, it also can promote organizational learning. The iterative cycle of problem finding, planning, and acting is designed to lead to learning on the part of those who are participating. The whole point of the participatory elements of action research is to promote learning. If evaluation can create organizational learning, then so can action research which incorporates evaluation into its regimen.

Educational Change

Educational change deals with the initiation, implementation, and continuation of the use of educational innovations (Fullan, 1991). These steps parallel those of action research: initiation is the planning stage, implementation is the acting stage, and continuation is a new cycle. Assumed in this is information about how the innovation is doing, or some evaluative information between implementation and continuation.

Action Research and Evaluation: Conclusion

Action research shares significant characteristics with evaluation and is also similar to some other action oriented social sciences. Since I have relied heavily on evaluation approaches in this study, I have justified my decisions by demonstrating the similarities and distinctions between the action research and evaluation.

This relationship strengthens them both. Action research is improved through access to a large body of literature on the practice and theory of making changes in human systems. I personally found the evaluation literature to be helpful in conducting the specific research activities of observing and reflecting. Evaluation is improved through access to literature which might be able to confirm the direction in which utilisation focused evaluation is moving. An expanded role for the evaluator seems to be encouraged through the action research literature. This contribution of my study to the literature is emphasized in Chapter VII.

Learning About Faculty Development: Action Research in a College of Medicine

To fulfil the purpose of this study, to learn more about faculty development through an action research protocol in a medical school setting, I selected, the College of Medicine at the University of Saskatchewan as the site for the research. In this section I provide a description of the College of Medicine, the primary participants in the action research project, and an outline of the specific research methodology I employed.

The action research model I employed, which was based largely on Stone's (1980) formulation, involved stages of identifying the problem, planning, acting, observing and reflecting. Stone's model easily incorporates the idea of evaluation, particularly in the initial stage of problem identification.

The concepts of Kurt Lewin embedded in action research are appropriate to the study of the changes at the College of Medicine. Yanoff and Bryan (1986) suggest excellent reasons for using Lewin's concepts in a health care system: the dynamic nature of the forces operating, the

call for new directions, the needs of the system, and the relationships which make the process more complicated. They report the successful application of action research at the University of Medicine and Dentistry of New Jersey. They wrote:

> As noted previously, institutional change is difficult particularly in medical schools. Using Lewinian principles as a conceptual base, we were able to plan, develop and implement an institutional planning process within a medical school. Such a model is applicable to other institutions. (p. 178)

The experience of New Jersey leads to the conclusion that an action research approach might be effective for adding to the existing body of knowledge and finding a solution to the problems in medical education. Action research appeared to be an appropriate model for this study.

Background Information on the College

In 1953, the School of Medical Sciences became the College of Medicine and its first class of 29 students graduated four years later. In 1970, the original four-year curriculum leading to the M.D. degree became a five-year curriculum but reverted to its four-year status in 1988. The undergraduate class size, which had increased to 60, dropped to 55 in 1992 due to provincial and national pressures. Royal University Hospital, a tertiary care centre, is physically attached to the College and acts as its major clinical learning facility.

The College has 250 full-time faculty members and 500 part-time. There are 50 full-time members in five basic science departments -- anatomy and cell biology, biochemistry, microbiology, pharmacology, and physiology. There are 200 full-time faculty members in 11 clinical departments -- medicine, family medicine, anaesthesia, obstetrics and gynaecology, paediatrics, psychiatry, surgery, rehabilitation medicine, community health and epidemiology, medical imaging, pathology, and the School of Physical Therapy. The part-time faculty are practising physicians who do various amounts of teaching at the College or in their offices. In the next part of this section I will describe the Office of Educational Support and Development, the unit which hosted the study.

The educational program leading to the M.D. degree at the College of Medicine is a four-year, five-phase program. Phase I is eight weeks long and consists of basic science courses at an

introductory level designed to bring students from diverse backgrounds to a common footing. The rest of first year, Phase II, is 25 weeks long. During this second phase some basic sciences are taught in an integrated fashion with support from a parallel course which highlights the clinical implications. Phase III, beginning in the second year, is 14 weeks long and features science courses such as pharmacology, microbiology, immunology, and pathology, which bridge the basic and clinical sciences. It also features as introduction to clinical medicine where students learn the fundamentals of history taking and physical examination. Phase IV spans the rest of second year and all of third year. At this point, there is a shift in learning setting from classrooms and laboratories to classrooms and the hospital. Students study the organ systems, such as cardiovascular, renal, and endocrine, in large classes. They also study the clinical sciences, such as medicine and surgery, in patient settings by "rotating" through hospital wards in small groups. Clinical settings provide the opportunity for medical students to apply the theory and skills that have learned in more formal settings. Phase V is a 50 week clerkship in Saskatoon or in Regina which provides students extended rotations through psychiatry, family medicine, surgery, paediatrics, obstetrics/gynaecology, internal medicine, and an elective. Upon receipt of their M.D. degrees, graduates enter residency programs in any one of a number of clinical specialties often at other schools of medicine. The majority of local graduates take up residency positions at the Royal University Hospital in Saskatoon, Saskatchewan.

Educational Support and Development

I did not work alone at the College of Medicine but, by design, became attached to and worked closely with, the Office of Educational Support and Development (ES&D). This unit, ES&D, was, for many years, staffed by just one person, Dr. H. James Spooner. He was a high school teacher in the Saskatchewan public school system for years when he returned to university as a graduate student and upon completion of his studies was offered a position in 1973 as an educator in the College of Medicine. His role in the College has varied but has always been related to the medical curriculum. He has served as assistant dean of the undergraduate education program, chair of a curriculum review committee, chair of admissions, coordinator of

accreditation reviews, and evaluator of programs and teaching. To formalize his role in the governance structure of the College, he was appointed Director of Educational Support and Development in 1986.

In the fall of 1994 Dr. Sheila Rutledge Harding, a Hematologist, was assigned as Assistant Director to the Office of Educational Support and Development for 30% of her time. Her main area of responsibility and work was the organization and promotion of faculty development, specifically a three-day, intensive introduction to teaching called the Teaching Improvement Project Systems (TIPS) which is described in more detail in Chapter IV. She had no formal background or training in teaching but had been recognized as not only an excellent teacher but as someone who would be able to promote the cause of better teaching in the College.

In November 1994, Drs. Spooner and Harding produced a five-year plan that envisioned expanding the work in faculty development with continued emphasis on program and teacher evaluation. Their mission statement emphasized both service and research: "To support educational programs of the College of Medicine in teaching, evaluation, and curriculum development, and to study the process." They defined faculty development as "teaching teachers to teach" and anticipated providing support for faculty in addressing the new pedagogical expectations of them. With the addition of Dr. Harding they anticipated that there would be more faculty development such as a teaching program for residents, TIPS for faculty on a more regular basis, as well as workshops for specific topics like problem-based learning. At that time they had only limited expectations of conducting research activities due to resource limitations.

Drs. Spooner and Harding and I met regularly, often weekly, as we worked together on learning about faculty development in the College of Medicine through an action research protocol. In a very short period of time we became a team and functioned well together in all phases of the action research cycles, observing, reflecting, planning, and acting. In the three chapters which follow this one, I often use the first person plural pronoun, "we," to indicate that what "I" did at the College was more accurately something which "we" did working in close collaboration. In many important ways, Drs. Spooner and Harding were researchers with me. To avoid the heavy repetition of names I will often refer to the three of us as "the team."

My Personal Commitment to Faculty Development

This explanation of my own interest and involvement in faculty development is consistent with the action research methodology I chose to employ for this study. In action research, the researcher is viewed as the subject of investigation and is a research instrument. I provide here some personal information that relates to my commitment to and interest in faculty development.

My interest in faculty development began early in my teaching career. As a teacher in a local K-12 school system, I helped to establish a system committee for the professional development of teachers. While conducting research for my master's degree I dealt with the level of use (Hord & Hall, 1987) by three teachers of a mathematics curriculum innovation introduced to all the teachers of that school division (D'Eon, 1988). I was struck by the variations in support which these teachers received and quickly became intrigued with professional development for teachers as an area of scholarly inquiry and professional practice.

My interest in faculty development for university instructors intensified after I gave some assistance to a faculty member from a professional college at the University of Saskatchewan. She was an accomplished teacher (as evidenced by her awards for teaching) who continued to make an effort to improve the quality of her instruction. After observing one of her lectures, I suggested that she try arranging the class into small work-groups which could collectively attempt some problems similar to those she had been explaining to them as a large group. She put my suggestion into practice and led a lecture with small group work which students found to be a positive learning experience that she said she would certainly use again.

During one of our conversations she asked me about a way to make the students think more deeply. By her laboured and inarticulate descriptions, I sensed that she was looking for something like a taxonomy of questioning (Bloom,1956). I explained to her that there were different levels of questions with some on a basic knowledge level and others at an application or problem-solving level. Questions at higher levels required more thought to answer. She was delighted to learn that there was something readily available which she could use to enrich her teaching. I eventually followed up on that discussion and sent her some print material on levels of questions. I was exhilarated that I had been able to contribute in two significant ways to the improvement of the teaching of an already competent faculty member.

Methodology Employed

I began by meeting with Drs. Spooner and Harding. We explored possibilities for research in faculty development and I was able to learn about the College of Medicine. I searched documents about the College and I read extensively in medical education. This was an intense period of learning for me as medical education was somewhat unfamiliar to me at that time.

I prepared for and conducted a needs assessment at the College of Medicine on faculty development. As outlined in Chapter IV and V, I interviewed faculty and students and sent a survey to all full-time faculty, selected part-time faculty, and all medical students. I also led an evaluation of the TIPS workshops which provided ES&D with important information. This sort of evaluation of TIPS had never been done.

I assisted in the design and implementation of an expanded faculty development program for the fall term, 1996. This was evaluated and modified for the winter and spring term of 1997. This latest version of the faculty development program is being evaluated as part of the continuation of the action research project. I helped to modify the TIPS workshops to make them even better learning opportunities for faculty. These initiatives are reported in Chapter IV.

I also assisted in the design and implementation of workshops aimed at creating a climate conducive to and supportive of teaching. These workshops, "Academic Leadership", as we named them, were evaluated and modified. Their continuing use is still being planned at the College of Medicine. This was reported in Chapter V.

I kept audio-taped records of team meetings and other interviews. These were reviewed and analyzed. I kept a personal journal of key events in the study. This journal identified information and issues helpful for reflecting on the study. As I was writing this study, I conferred with Drs. Spooner and Harding together and individually regarding the accuracy of my observations. They read many versions of various chapters and provided me with an important perception check.

Limitations

Several factors have influenced this study and limited it in depth and breadth. These

have been factors beyond my control but which need to be considered in reflecting upon this study. Those factors, as outlined below, are time, resources, and generalizability.

Time. Despite the fact that this was a 14 month study, time was a limiting factor. I was only able to begin a process of initiating and evaluating faculty development programs and there is much work that could be done. Given more time, this study could have produced much more data about the longer term effects of the faculty development programs that were initiated. Fourteen months is not a long time in an action research project. When new approaches and ideas are involved it takes many years for them to be completely adopted (Rogers, 1962) or to learn that they have not been successfully integrated into the institution.

Resources. Both the human and material resources at my disposal limited the scope of this study. There were many rich ideas and suggestions which could not be acted upon for lack of resources.

Generalizability. The research setting I chose has characteristics that are both distinctive and representative of the other 15 medical school in Canada. This raises issues about the generalizability of the findings from this study. Much of what we have discovered may apply only to this specific setting.

Summary of Chapter III

Action research is a methodological process engaged in the task of learning from experience. Action research attempts to change the situation for those participating in it and to add to the stock of knowledge which we have about a particular topic. Action research is effective in uncovering basic knowledge, shedding light on the kinds of information about social systems with which this study was concerned, namely faculty development. Action research takes place in real settings and complex environments. I chose to work in the College of Medicine, University of Saskatchewan, with Drs. Spooner and Harding as part of the Office of Educational Support and Development. The next three chapters describe the key activities and results of this action research project.

CHAPTER IV

FACULTY DEVELOPMENT AT THE COLLEGE OF MEDICINE

In this chapter I provide the setting for faculty development, a review of the educational program at the College of Medicine. I also outline the two main components of the faculty development program which were operating at the College of Medicine and which were the objects of this study. The first of these was the TIPS workshop and the other was the set of half-day workshops which grew out of the needs assessment. According to the action research cycle of observe, reflect, plan, and act, I describe and evaluate the TIPS and the half-day workshops in turn.

A Review of the Educational Program at the College of Medicine.

The action research cycle includes the stages of observe, reflect, plan, and act as outlined in Chapter III. This review of the educational programs at the College of Medicine would best be described as the observing and reflecting stages of the action research cycle as portrayed in Figure 4 which has been adapted from Stone's (1980) formulation. The several iterations of the action research cycle are illustrated but only the observing and reflecting stages are darkened to indicate that the review of the College is described by these two stages. Since each stage leads logically to the next, the planning stage has been labelled and only the outline of the cycle illustrated. This pattern of labelling the next stage on an outline of the spiral is repeated in all the figures which use the action research model to help explain the activities of the project at the College.

Here I was taking a close look at the College's educational program for some indication of both the intensity and direction of the need for faculty development. The review of the College

also included an exploration of previously published research. This part of the study was a form of evaluation, an opportunity to assess the strengths and needs of the College which then led into the planning and acting stages reported later in this chapter.

Some Strengths of the College's Educational Program

A review of the College of Medicine, Towards a New Beginning (White, 1989) which is referred to as the "Kerr White Report," was fashioned in the wake of medical reform sweeping over North America. The Kerr White Report upholds the educational mission of the College as its most important purpose.

> The education of physicians to provide health care to the people of the Province must be the primary mission of the College....without the provision of undergraduate medical education, there would be little justification for a school of medicine in Saskatoon. (p. 25)

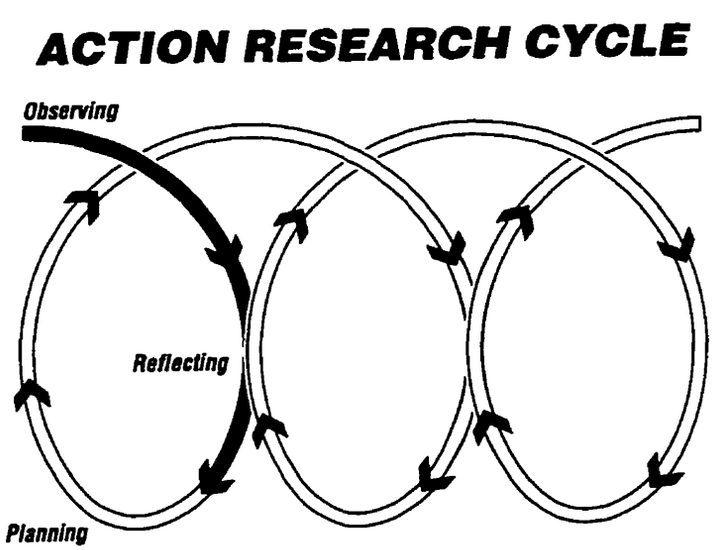

Figure 4. The review of the College of Medicine: Observing and Reflecting stages of the action research cycle.

The Report summarizes three strengths of the College program in undergraduate education. First, the program attracts excellent students and they generally perform above the national average on qualifying exams. Second, the College is sufficiently small for some close interactions among faculty and students to take place. Third, students are exposed to all the major clinical services in a consistent and balanced manner (p. 26). The Report deals mostly with curricular reforms such as the integration of the internship year into the regular postgraduate clinical training program (which at this time had been accomplished), paying greater attention to primary care and health economics, encouraging rural practice, as well as giving greater emphasis to ethical issues (pp. 26-27).

In January 1992 a survey of graduates from the years 1957- 1989 was completed (Spooner, Lipps & Ferguson, 1992). Of the 1508 graduates on record, correct addresses were found for 1325 of which 89.8% responded. Section 2 of the questionnaire sought information related to the educational mission of the College. Graduates were generally very positive about the training that they received at the College. In response to question 2.1, "To what extent did the curriculum prepare graduates for their first year of postgraduate clinical training?" graduates indicated that they were "somewhat well" to "well" prepared with a mean rating of 5.49 on a seven-point scale. Question 2.2 asked "How well did the undergraduate curriculum prepare graduates in terms of specific aspects of practice?" Six of the nineteen aspects of medical practice were rated between "somewhat well" and "well" prepared. These were all clinical skills. Six of the nineteen practices were rated as inadequate; these were non-clinical or practice management related aspects. This led to the conclusion that the "graduates are well prepared as clinicians; they literally can step into any ward situation and function with a high degree of competence" (p. 5).

Graduates also noted in their comments that the University of Saskatchewan medical program prepared them well for postgraduate study and clinical practice. They described their education was first-rate or excellent. A number commented on the high standard of teaching and many noted great teachers under whom they had studied. Overall, graduates gave the College of Medicine a high rating in curriculum and teaching.

An accreditation review of the College was completed in the spring of 1995 by the Committee on Accreditation of Canadian Medical Schools/Liaison Committee on Medical Education. These Reviews are routinely conducted every seven years; the next full review for the

College will be in the year 2002. Reviews included both an internal and an external evaluation. Many of the points made and recommendations generated by this review are related to the quality of instruction. The Accreditation Review pointed out many strengths of the College such as the enthusiasm, skill, and high morale of faculty, and made the observation that all departments were not equal in the quality of education they provided.

These three current reviews (The Kerr White Report, The Graduate Survey, and the Accreditation Review) highlighted some of the many strengths and accomplishments of the College of Medicine regarding its educational mission. These strengths must not be overlooked or understated. They force us to recognize that much has already been done to enhance instruction and that efforts in faculty development at the College are *continuing* to develop effective teaching. As stated earlier, it is as if this action research project had begun before I arrived at the College to conduct this particular study.

In response to a need for improved instruction, the College of Medicine instituted a program for faculty development (TIPS) and a system of faculty evaluation as described below. Any consideration of faculty development in the College of Medicine must acknowledge that much work had already taken place. It was important in trying to learn more about faculty development to recognize and learn from the programs which were operating at the College. These existing programs were candidates for study.

Evaluating Teaching

The College of Medicine has two systems for the evaluation of teaching. One of these, based on student evaluations, was developed in 1982 by the Committee on the Evaluation of Teaching (which soon changed in name to the Committee for the Development of Effective Teaching, the CDET). Resource persons were contracted to help introduce the system and when it was validated the system was approved by faculty. This system has been adopted by a few of the departments. The other more recent innovation is the use of the teaching dossier as a method of self-reporting. The dossier is being used in personnel decisions and is being promoted as a vehicle to allow individual instructors to reflect on their practice of teaching.

The Teaching Improvement Project Systems (TIPS)

TIPS was developed in 1975 at the University of Kentucky Centre for Learning Resources to improve teaching in the health professions. It is a two and one-half day workshop designed to give instructors basic knowledge and skills in crucial aspects of the teaching-learning process such as setting objectives, organizing instruction, and questioning (Craig, 1988).

TIPS workshops have been operating in the College since 1993. In the spring of that year three facilitators from the University of British Columbia came to Saskatoon to present a TIPS workshop to faculty. In the spring of 1995 Dr. Spooner and two outside consultants, one from the university of Alberta and the other again from the University of British Columbia, presented the second TIPS workshop on campus. The first "solo flight" took place in Regina in October 1995 led by Drs. Spooner and Harding. The last TIPS workshop was given in December 1996 facilitated by Dr. Spooner, myself, and the another trained TIPS faculty. The goal is to provide four TIPS workshops per year at the College, three for faculty and one exclusively for residents.

Summary of the Review of the College of Medicine

The College of Medicine has a successful and well respected educational program at the undergraduate level according to several documents and reviews conducted prior to the start of this action research project. There is, still, as in most medical schools, a preponderance of didactic or lecture based teaching. The system of student evaluations of teaching was designed to initiate a process of identifying the elements of effective teaching to make improvements. The TIPS workshops were introduced at the College to train physicians and scientists as effective teachers, and as such TIPS is a logical step to follow the implementation of the system for the evaluation of teaching.

Evaluating TIPS

The evaluation of the TIPS workshops formed part of the observation and reflection

stages of this action research cycle. In the case of the evaluation of TIPS, the observations are being made on an intervention previously introduced at the research site. TIPS already existed and was operating quite well before this project began. Evaluating TIPS might be considered to be an evaluation of the context (Stufflebeam, Foley, Gephart, Guba, Hammond, Merriam, & Provus, 1971) which I considered to be necessary before making recommendations for possible action.

Rationale for an Extensive Evaluation of TIPS

There exists a paucity of information concerning the effectiveness of TIPS. There have been no rigorous research studies reported in journals and the only known evaluations of TIPS workshops either at this site or other Canadian sites have been limited to participant questionnaires of satisfaction immediately following the workshops. Participants have consistently reported that the workshops were very worthwhile and sometimes exceeded their expectations which is reported in detail later in this chapter. Although this information is sometimes considered sufficient evidence to justify program costs (Eison & Stevens, 1995), reports of satisfaction are most helpful for faculty developers to make improvements and to promote the workshops (Henderson, 1978).

Informal anecdotal records abound to show the effectiveness of TIPS for improving teaching. Faculty have been known to say of their colleagues that they noticed a definite improvement in presentations following the TIPS workshop and of residents that they could tell which ones had taken TIPS. However, data on how teaching practices have changed had never been systematically collected. There was also scant documentation in the literature that assessed program impact for similar faculty development workshops (Reid, Stritter & Arndt, 1997; Weimer & Lenze, 1991). This lack of evidence was a cause for concern to the Dean of Medicine who, in a climate of restricted funding, wanted to know if the workshops were worth the financial and human investment (see Appendix 1, February 19, 1996). This lack of information on the efficacy of TIPS workshops also concerned our team as we continued to promote and deliver TIPS to faculty and residents.

Using the Framework for Faculty Development to Evaluate TIPS

Successful faculty development is recognized by the degree to which the programs help teachers attain objectives which call for growth in knowledge, skills, and attitudes. TIPS can be judged with actual outcome measures and by using the framework for thinking about faculty development proposed in Chapter II. The framework helps to evaluate the processes being used that have been shown to result in effective faculty development. Outcome measures try to gather data on changes in knowledge, skills, and attitudes more directly. In this section I use the framework first and then turn to outcome measures as indicators of success. That framework included four components: (a) elements of teaching as a social practice, (b) both competency and performance orientations, (c) observance of characteristics of successful programs including needs assessments and careful implementation, and (d) organizational and social supports.

Teaching as a social practice. TIPS workshops were designed to meet a need among faculty for training in the practice of teaching. As such, they fell into the Skills-Training model of Gall and Vojtek (1994) explained in Chapter II. However, they did provide several important opportunities, both scheduled and more spontaneously, to talk about teaching. The opening session of the TIPS workshops was a look at teaching and learning. The definition of teaching as the act of helping someone learn created a surprised reaction in most faculty. This kind of discussion is consistent with thinking about teaching as a social practice. Teachers need to talk about the central purposes of teaching in order to be able to judge present practices. At TIPS, faculty are led in such a discussion. They were guided in grappling with the incongruence between the stated purpose of teaching and cognitive stuffing, what most of them admitted that they had been doing up to the time of the TIPS workshop. They were also invited to stretch their thinking to include, more often, considerations of the impact of teaching on students. (For a report of how teachers changed following the TIPS workshops, see Table 3.) There are also unstructured moments for faculty to talk about teaching. Several meals are shared while at TIPS and participants are encouraged to talk about teaching. Break times were also used to continue discussions about teaching begun during the formal sessions. Although TIPS is predominantly a short program (Hitchcock, Stritter & Bland, 1993) with a skills development focus, it does, in a limited way, address the implications for faculty development of thinking about teaching as a social

practice.

Competency and performance orientations. The sessions at TIPS were well crafted and arranged to provide utility and practical application to real teaching situations. The topics included setting objectives, questioning, and elements of an effective teaching plan. There was a built in feedback loop after the micro-teaches. Different learning styles were accommodated by having different facilitators and by using a variety of instructional strategies. There were transfer strategies incorporated within TIPS. The key feature of the model is that expert trainers explain as well as model the target skills and lead the participants in guided practice with coaching provided in the work setting.

In TIPS, some theory is presented and modelled in the actual sessions, a strength of workshops generally (Skeff et al, 1992). Two "microteaches" of 10 minutes each provide opportunities for participants to practice presentation skills with self and facilitator critiques. Participants are given direct feedback regarding their performance during their microteaches by the TIPS faculty at least, and sometimes by the other group members. Those taking TIPS are also coached throughout the workshop in developing objectives, and organizing their microteach into a well designed lesson. We made the offer to provide coaching for them back in their work setting, but up to this point, there have been no requests made.

Local workshops are known to provide more extensive and ongoing training for large numbers of faculty than do national meetings and conferences (Wright, 1995; Skeff, 1992). This is certainly true of TIPS which can take up to 18 participants for approximately the cost of sending two or three away to a TIPS session at another site in Canada. Another advantage is that the local TIPS faculty, clinicians or basic scientists, lend considerable credibility to the workshop (Rogers, 1962). As well, TIPS faculty themselves receive an invaluable developmental experience through preparing and presenting TIPS workshops to their peers (Eison & Stevens, 1995).

TIPS is, as it is advertised, an intensive course. The stress is felt particularly by faculty in trying to juggle commitments in their very busy schedules. Many have trouble finding three days together that they can free up to devote to learning about teaching. Many registrants have cancelled at the 'last minute' because of some urgent and unavoidable work related responsibility. Although the three days barely allows TIPS faculty to teach the basics of teaching, it is an effort for faculty to protect the whole time.

Observance of characteristics of successful programs. There was an informal needs assessment conducted prior to starting TIPS workshops at the College. Although no formal needs assessment was conducted at that time, the success of TIPS described later in this chapter is testimony to the fact that TIPS is filling a need for the development of teaching skills.

TIPS was not aimed at "deadwood", faculty who are known to be exceptionally poor teachers, but was offered to all faculty as a way to improve their practice of teaching, even for those who feel they are already doing fairly well. With overall participation at about 25% of full-time faculty, TIPS has touched the practice of a large proportion of faculty. Drs. Spooner and Harding continue to be enthusiastic about TIPS, and in fact, Dr. Harding regards one of her responsibilities to be a 'cheerleader' for TIPS and faculty development generally. Many participants have been department heads. TIPS has a high and respected profile. And, as I discuss in the next section of this chapter, there is evidence that participants have made some tangible changes in their teaching practices. All of this points to a promising future for TIPS at the College of Medicine.

Organizational and social supports. TIPS was generally operating as a stand alone program for faculty development. Initiatives to raise the profile of teaching at the College, such as instituting the teaching dossiers, were not being systematically planned. Nor were there any formal mechanisms in place to link TIPS participants or to provide follow-up support. This lack of organizational and social supports for faculty development at the College prompted the team to consider the academic leadership workshops described in Chapter V and other mechanisms described in further sections.

Evaluating TIPS With Outcome Measures

We decided to answer the question, "How much has TIPS helped the participants to become better teachers?" We chose to focus on the frequency of the effective teaching behaviours that had been highlighted during the workshops and on attitudes towards teaching. Our hypotheses were that (a) instructors would perceive that they were displaying the effective teaching behaviours with greater frequency at the time of the survey than before the TIPS experience, (b) that their attitudes about the complexity of teaching would change as a result of the TIPS experience, and (c) that they would remain personally committed to teaching as an

important function and role. To test our hypotheses we needed to collect "Before" TIPS and "After" TIPS data. We assumed, based on our own understanding of the faculty development opportunities available, that other influences on teaching behaviour were negligible.

Research design. There is a serious methodological problem in administering questionnaires 'before' and then 'after' a faculty development session. With the conventional pretest/posttest design, the subjects would be judging their behaviours on the basis of different standards, one standard from the period before and one acquired during the workshop. Faculty often feel they are very good teachers (Lucas, 1994) and rate themselves high on the 'before' questionnaire. On the 'after' questionnaire, having learned about exemplary teaching practices, they might rate themselves lower (Skeff et al, 1992). This could sometimes give the appearance that the frequency of effective teaching behaviours had actually declined or had not improved to any notable level. To avoid this limitation we administered a retrospective self-assessment questionnaire (Bland, 1980). Retrospective self-reports may be a valid method of collecting useful data (Anglin & Chou, 1993).

The questionnaire sought information about teaching practices and attitudes about teaching. Participants were asked to consider the frequency with which they typically displayed effective teaching behaviours at the time of the survey (*after*) and prior to the TIPS workshop (*before*). In this way the standard for judging their behaviours was based on that following the TIPS experience. Using a seven-point scale, respondents indicated whether they used the teaching behaviours 'Never' through 'Sometimes' (50%) to 'Always' (100%). They were also asked to indicate on a four-point scale their agreement with two statements of attitudes about teaching from "Strongly Agree to Strongly Disagree". Questionnaires were sent out to three different groups of TIPS participants which had taken the workshops four months, five months and 12 months before the time of the survey . The responses of all three groups were included together although they had taken the TIPS workshop under different circumstances, were at different intervals from the actual workshop experience, and were reflecting over different lengths of time. The third group was polled three months after the other two. An analysis of the groups revealed significant similarities in their responses both on the 'before' and 'after' parts of the statements. We therefore felt justified in considering them to be one group for purposes of statistical analysis.

The means of the 'before' and 'after' assessments of teaching behaviours and attitudes were compared using correlated *t* tests. The statistical package SPSS (SPSS Inc. 1993) was used for analysis. Differences were considered significant at the $p \leq 0.05$ level.

Instruments. The TIPS participants were given a 7-point Likert scale on which to indicate the frequency of their own effective teaching behaviours. They rated themselves on nine statements depicting the effective teaching behaviours taught, modelled, and practised at TIPS workshops (See Table 3). Faculty assessed themselves on how often they displayed each of the nine target behaviours.

Table 3

Frequency of Target Teaching Behaviours "Before" and "After" TIPS

Statements About Target Teaching Behaviours	Means	
	Before	After
I formulate objectives appropriate to my teaching situations.	2.10	4.98
I provide a motivational set when presenting.	2.12	4.50
My presentations are well planned and organized.	3.71	4.88
I apply effective presentation techniques.	2.81	4.88
I formulate questions which promote thinking in students.	2.86	4.70
I use teaching methods which help students become active participants.	2.79	4.65
I use an appropriate closure in my presentations.	2.70	4.74
I display enthusiasm when teaching.	4.12	4.79
I actively consider students and their learning when I teach.	3.49	5.21

Notes The higher the scores, the greater the frequency: range of 0 to 6.

n = 42

$p < 0.001$ for all comparisons.

They were also provided with a 4-point Likert scale to indicate the strength of their agreement or disagreement with two statements depicting attitudes about teaching (See Table 4). Both the frequency of the teaching behaviours and attitudes were measured on the same questionnaire at the same time.

Results for teaching behaviours. The nine statements of teaching behaviours were analyzed comparing the means of the 'before' TIPS to the 'after' TIPS responses using correlated *t* tests. There were 35 faculty surveyed of whom 24 responded giving a rate of return of over 68%. Table 3 shows that for all nine behaviours there was a significant difference in each of the frequencies of effective teaching behaviours reported with $p \leq 0.002$. Participants perceived that they were following the models from the TIPS workshop more frequently than before they took the TIPS workshops.

Results on attitudes about teaching. Two statements of attitude about teaching were also analyzed and the means of the 'before' compared to the 'after' responses. Although there was a slight increase in the mean score for the importance of teaching at the College of Medicine (from 1.29 to 1.21), this was not statistically significant. Concerning the statement about appreciating the complexity of teaching there was a significant change from 'before' to 'after'. Most of those

Table 4

Attitudes About Teaching "Before" and "After" TIPS

Statements of attitude	Means	
	Before	After
I appreciate the complexity of teaching.*	1.75	1.13
I believe in the importance of teaching at the College.	1.29	1.21

Notes The rating of 1 indicated "Strongly Agree."

n = 24

*$p < 0.001$.

responding marked 'Agree' for their 'before' response and almost all respondents marked 'Strongly Agree' for their 'after' response (from a mean of 1.75 'before' to 1.13 'after'). Table 4 contains the summary of the responses on the statements of attitude.

Results for individuals. The means of all nine teaching behaviour scores for each individual's 'before' and 'after' TIPS responses were compared to try to detect significant changes in the frequency of individual patterns of effective teaching practices. We knew that the group as a whole showed significant changes in each of the target teaching behaviours. We wondered if we could detect significant changes in individuals if we aggregated their scores for all nine of the target teaching behaviours. We found that 21 of the 24 TIPS participants who responded reported significant changes in the frequency of their use of target teaching behaviours; twelve individuals reported changes of between one and two intervals (16% to 33%); and eight individuals reported changes of between two and just over three intervals (33% to 53%). This indicated to us that TIPS was probably having a profound impact on the individual participants.

Participant Satisfaction with TIPS

Participants have consistently reported that the TIPS workshops have been worthwhile learning experiences (Craig, 1988). I have summarized what I consider to be the more important indicators of quality for the past five TIPS workshops (Appendices C-1 and C-2) at the College of Medicine. They are (a) the overall teaching effectiveness of the core TIPS faculty and team taken together; (b) the central skill building sessions on objectives, organizing instruction, questioning, and evaluating students; and (c) the opinion of participants regarding how much they learned and how worthwhile they found the workshop.

The two core TIPS faculty that anchor the workshops have consistently been rated between "Very Good" and "Excellent" by participants. They are usually accompanied by one other facilitator and together the team has also been rated above "Very Good." The specific skill building sessions on objectives, the organization of instruction, questioning, and evaluating students received ratings that hovered around the "Very Good" mark. These ratings indicate the

high regard participants have for the TIPS workshops, which is essential for long term success.

In spite of these high ratings, the TIPS faculty are searching on a regular basis for ways of making the workshop better. The most recent suggestion was to improve both the objectives and questioning sessions. This quest for improvement bodes well for the continuing success of the workshops. It may have been that some of the changes introduced for the December 1996 rendition of TIPS resulted in the very high scores for that TIPS workshop shown in Appendix C-1.

On both criteria cited for the last five TIPS workshops, participants expressed a level of agreement between "Agree" and "Strongly Agree" except for December 1996 where all nine of the ten participants returning evaluation forms strongly agreed that they had learned. All these scores reinforce what Appendix C-1 shows, that participants valued the workshops very highly.

This information tells us that TIPS participants valued their experience and recognized it as being a sound investment. These findings are amplified by the comments which faculty made about the workshops.

Comments by faculty about TIPS. Selected, representative comments by TIPS participants from three of the workshops are included below:

1. "I was doubtful at first, but I believe I picked up 3 new and useful tools. I am looking forward to trying them."

2. "Very useful! Learned about the "language" of teaching and now can consciously think about what I or others have been doing either right or wrong."

3. "Great course. I will recommend to my colleagues."

4. "Very practical, well taught course. Enjoyed it!"

5. "Show the example of the microteaches first day. It provides more direction/expectation: 'this is an example of what you are going to learn and we will teach you how."

Comments made by the TIPS participants were not only used for this summative evaluation. They were used for formative purposes as well. In meetings following each of the TIPS workshops, the comments from that workshop were reviewed and taken into consideration during deliberations about how to improve TIPS.

Discussion of Outcome Measures

The evidence from the evaluation of TIPS indicates that faculty have experienced significant changes in teaching practices, focus, and attitudes as a result of the workshop experience.

Changes in teaching practices. This study provides some evidence that TIPS workshops are effective in changing teaching behaviours. Although I fully acknowledge the limitations of this study and will discuss them at length, I affirm the importance of our research in an area where there is little else to draw on. These results establish that the participants, who consistently find that the workshop is a worthwhile experience, feel that they have made improvements in their teaching practices many months after the workshop. This study provides further and more systematic indication that TIPS was a key factor in changing teaching practices. These findings do confirm our hypothesis that the TIPS workshops have a positive effect on the frequency of effective teaching behaviours and justify the promotion and delivery of the workshops. This information can be used by decision makers to support TIPS and faculty development in general.

I am confident in my interpretation of the data that TIPS can have a generally favourable impact on the frequency of effective teaching behaviours for the group as a whole. However, this research has suggested that TIPS workshops are effective in changing the teaching practices of individuals as well. I am cautious about this conclusion (Henderson, 1978). In our analysis of individuals, each teaching practice was given equal weight whereas some practices are arguably more important than others and ought to be given greater weight in an overall score. Some changes may have been easy to make for certain individuals and others more difficult thus skewing an aggregated score and giving the false impression of significant and meaningful change. These alternative interpretations could be addressed in further research which would rank the teaching behaviours and rescore the data or readminister the questionnaires.

Change in teaching focus. I would like to note in particular the last statement of teaching behaviours: "I actively consider students and their learning when I teach". Of all the statements of teaching behaviours, this one was rated the highest in the 'after' section and was neither high nor low in the 'before' ratings. For this behaviour, then, those who took TIPS moved from a rating approaching 'Usually' (4.71) to between 'Often' and 'Always' (6.33). The learning centred

perspective of the TIPS workshops was new to many participants, and evidently made a strong impression.

I consider one of the major effects of TIPS to be a redirection of the thinking of teachers to the learning needs of their students and away from their own teaching needs or patterns. For many, this may represent a paradigm shift from an instructional mode to a learning mode (Barr & Tagg, 1995) and may be attributable as much to the internal qualities of the TIPS workshops as to the timeliness of the intervention in the careers of these participants. This change in thinking is evidence that the norms of faculty have been affected by the workshop.

Changes in attitude. Our second hypothesis regarding the complexity of teaching was also confirmed (See Table 4). TIPS participants grew in their appreciation of the complexity of teaching through the TIPS experience. They did not show any significant change in their belief in the importance of teaching at the College. These people were already committed to effective teaching as evidenced by their participation in TIPS. Hence our third hypothesis was confirmed although we were surprised that there was even a small change in this attitude.

Limitations and Further Research

This survey seems to confirm anecdotal evidence and observations of TIPS proponents that there is change in teaching practices after TIPS workshops. However, there are problems with the methodology and there are still some questions that have not been answered.

Lack of independent confirmation. There was no independent confirmation of the frequencies reported by the participants. Neither student, peer, nor third party observations were collected to corroborate the perceptions of the participants. Because these participants were committed to teaching improvement, they may have reported some false positive changes in their practice (Feldman, 1986). Respondents may also have tried to please the researcher and thus marked the frequencies higher on the "after" sections though this is unlikely for reasons discussed in Chapter III.

Lack of quality assurance. There were no objective observations of the quality of the teaching behaviours on which the participants rated themselves (Leithwood & Montgomery, 1980). We did not assess the quality of the objectives, questions or presentations, for example.

It might be the case that these respondents were indeed accurately reflecting the frequency of their teaching behaviours, but that the quality of the behaviours was greatly below the standard set at TIPS or at least that the quality was not consistent among the respondents. A significant lack of consistency among respondents would make comparisons invalid.

Lack of data on use of teaching techniques. There is no information on how these practices were used in the teaching of the participants (Hord & Hall, 1987). Were they using the effective behaviours in an integrated manner, or was their use of the teaching techniques awkward? The way in which the effective teaching behaviours were employed could have had a great impact on the overall effectiveness of the teaching approach. More research needs to be done in these three areas to confirm or clarify the present research on the value of the TIPS workshops.

Lack of data from those who did not attend. It would have been helpful to collect data from those who did not attend the TIPS workshops. Answers to questions about perceived need and content, scheduling issues, and teaching priorities would be valuable in making changes to be more inclusive and accessible for all faculty. We do not know if there is an important group of faculty who are not being served by TIPS and could be. This group of faculty could also form a "control group" for comparison with TIPS participants on teaching behaviours.

Lack of data from those who did not respond. We have no way of knowing if those who completed the questionnaire were the more committed or had learned the most. It might be that those who did not return their questionnaires were not as confident of their teaching practices. I have made the assumption, which is open to challenge, that the respondents are a representative group of TIPS participants.

Alternative explanations. For most participants, TIPS was the first major opportunity to learn about teaching. Even a workshop of lesser quality than TIPS might be able to generate measurable changes in actual practices if it were the first serious and high-quality opportunity to train for teaching. In other words, I have not compared TIPS to other similar workshop experiences. The corollary is that TIPS may not have the same impact on a group of well-trained instructors. For example, faculty members who had taken part in several short faculty development sessions prior to taking TIPS may not register the same degree of change in teaching behaviours. It may be the case that these changes in teaching practices are due, in large

part, to the timing of the faculty development intervention in the career of the participants rather than to the specific internal qualities of the TIPS workshops alone. Nevertheless, I am confident that TIPS can produce significant changes when used as it is now offered at the College of Medicine. This is both a caution to those who may be tempted to be overzealous for TIPS and is an opportunity for further research.

Experimental Design. These limitations might be overcome with a rigorous experimental design which uses observations from several sources. One advantage of conducting parallel observations (self, peer, student, and expert) might be in establishing a relationship among them. If the self evaluations were to prove accurate compared to student and expert observations, it would then be possible, with some confidence, to administer quickly and more economically, the simpler self-evaluation instrument.

We have plans to continue through the action research protocol of observing and reflecting by conducting such an experiment. We intend to make video tapes of teaching by instructors who will attend TIPS workshops both before and about three months after TIPS. We intend to make a set of video tapes of teaching by instructors chosen randomly from faculty at the College who will not be attending the workshop during the same periods of time. Raters will not be told which instructors took TIPS nor the time of the taping. The teaching will be assessed according to a TIPS scale used in the microteaching sessions.

Using statistical analysis of the group data, we will be able to search for significant differences in teaching practices for the TIPS group before and after the TIPS experience. We also intend to explore the relationships between the TIPS group and the control group. We will want to know if the TIPS group was significantly different from the control group either before the TIPS experience and/or after the TIPS experience. Our hypotheses are that there would be significant improvement in the post-TIPS group over the control group in many if not all of the measures of teaching effectiveness. This study has not been started but has been suggested by the research which we have already completed.

Expanded retrospective questionnaire. Some information about the quality of the teaching behaviours could be obtained in the same questionnaire that asks about frequencies. It might even be possible to ask for a 'then-after' comparison to acquire data about perceived changes based on the TIPS standards for objectives, organization, questions and others target

teaching behaviours. Though this would not be as valuable as observations by trained observers, it would give us some indication of the quality of the teaching behaviours being reported. My hypothesis is that faculty would report, following TIPS, that they were using moderately authentic versions of the target teaching behaviours, and that they have made significant improvement since the TIPS workshop.

Likewise, we could obtain data about how comfortable faculty were with the new ideas from the TIPS workshops. This would give us some indication of the level of use (Hord & Hall, 1987) of the new strategies they were trying so we could take some action to support faculty in their effort to improve their teaching. My hypothesis is that faculty would still be somewhat uncertain about the target teaching behaviours and that they would need more support before considering that they have mastered the techniques.

Conclusion to Evaluation of TIPS

The TIPS workshops were well designed for skill development according to the framework identified in Chapter II. There were also opportunities built into the workshop for faculty to reflect together on their practice thus accommodating the social practice approach to faculty development. TIPS workshops exhibited many of the characteristics of successful faculty development workshops. According to our preliminary research, TIPS has produced changes in the way that participants teach. Participants reported that they are using the target teaching behaviours more frequently after the workshop than before. The TIPS faculty were experienced and highly competent facilitators who were regularly trying to improve the TIPS workshops. The workshops enjoyed a very strong reputation and were held in high regard by the participants. TIPS is a strong program and will likely continue to be the cornerstone of faculty development at the College of Medicine.

Building a Faculty Development Program around TIPS

In this second part of the chapter I describe how our team, using an action research

approach, built a faculty development program with TIPS as the cornerstone. This process involved conducting a needs assessment, designing the program, and evaluating our initiatives.

Needs Assessment

As indicated in Figure 5, the needs assessment can be classified as the observing and reflecting stages of the action research cycle. This representation was based on Stone's (1980) description of action research detailed in Chapter III. The next part of the cycle is included to portray the continuous nature of action research. This major appraisal of the needs of faculty at the College formed the basis of much of the deliberations crucial to establishing our faculty development programs. As well, this needs assessment could be readministered in three to five years to provide an indication of changes taking place at the College. In some ways, a second application of the needs assessment survey will represent a major evaluation stage for the faculty development programs which we have initiated and are now supporting. The results of this second needs assessment will not be known until well after this dissertation has been completed.

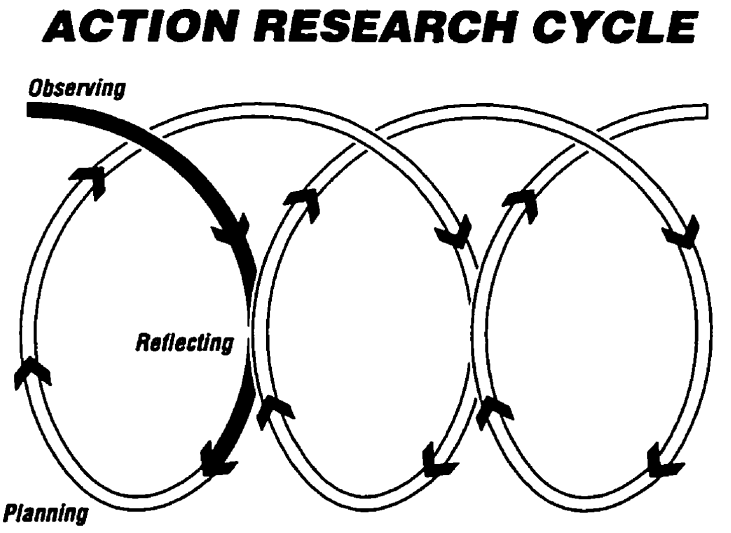

Figure 5. The needs assessment: Observing and Reflecting stages of the action research cycle.

That is not a cause for concern, but simply an indication that the action research process of observing, reflecting, planning and acting continues for extended periods of time, and some might argue, could continue indefinitely.

There were four separate surveys given, all of them designed from the same model, and so all quite alike. This was done for comparison purposes. I report the results of three of them, two for faculty and one for students. The survey given to residents had an unacceptably low rate of return and was disregarded.

Faculty Survey

The survey for faculty was the most important of the surveys we conducted due to the subjects we were polling and the information which it gave us. One questionnaire went to full-time faculty and another to part-time faculty.

Purpose. The needs assessment survey sought information on the interests of faculty in attending various workshops on teaching as well as the opportunities and barriers to instructional improvement at the College of Medicine. This second purpose of the needs assessment questionnaire will be developed in Chapter V. This was the major method that I used to gather data that guided our selection of the content for the faculty development programs we built. To collect this information, I designed a questionnaire which was based on (a) a review of the literature, (b) interviews with full and part-time faculty and with undergraduate students, and (c) the informed understanding of the needs of the faculty expressed by Drs. Spooner and Harding. We pilot tested the instrument with a small number of faculty before distributing it. Several sources of data were used to help design the questionnaire (Bland, 1980).

Distribution. In the spring of 1996 ES&D distributed the questionnaire to all 218 full-time faculty. Two reminders were sent out and we eventually received 90 responses for a rate of over 41%. At the same time we distributed a similar questionnaire to 98 of the most active part-time faculty using self-addressed, stamped envelopes. We received 51 responses for a rate of 52%. The response rates are sufficient to provide a degree of confidence in the results.

Face validity of the faculty survey. There are other reasons which gave us confidence in the results. Demographically, the respondents came from all departments and the proportion of

clinical, basic science, and "support" faculty matched the general population (see Appendix C-3). The proportion of respondents to the needs assessment survey who had already taken the TIPS workshops also matched the general population so there existed no over-representation from those who appeared to be most interested in improving teaching. Furthermore, the descriptions of the workweek of basic and clinical faculty given by the respondents corresponded closely to what we had already observed to be true (see Appendix C-4).

We also have confidence in the needs assessment because the items express faculty development opportunities which are commonly believed to be important for the improvement of teaching. We asked faculty about (a) active learning strategies; (b) techniques to assess their teaching; (c) principles of adult learning; (d) problem-based learning in classroom instruction; (e) teaching in small groups; (f) establishing rapport, enthusiasm and motivation; (g) evaluating students; (h) setting appropriate objectives; and (i) developing new courses or redesigning old ones. Some of these we found on another needs assessment (College of the Canyons, 1993), others were suggested in interviews, some from the TIPS course, and others from our own experiences.

Determining interest of faculty. Since we were to use the information to plan a voluntary program for faculty development, we were most concerned about the level of interest and commitment to attend sessions based on the brief descriptions we listed in the questionnaire. The directions were, we thought, straight forward and easy to interpret (see Table 3). We simply wanted to know which sessions faculty were likely to attend.

Student Survey

We thought that it would be important to receive a student perspective in the needs assessment which covered teaching improvement, so we developed a student survey to correspond to the one we designed for faculty.

Development and distribution. The survey was developed through a series of semi-structured group interviews with students at all four years. The instrument, which paralleled the faculty form, was pilot tested by a small number of students and faculty. Questionnaires were distributed to 220 students in the four years of the undergraduate program. We received 71 for a

response rate of just over 32%. If we consider that most of the responses were from third and fourth year students (we received 59 of 110 in those two years, 53% of that population) we believe that we have data from a credible sample of students. Students were asked to recommend various faculty development sessions which we had described for faculty and residents, using the same language as on the faculty survey. This allowed us to compare the ratings given by students and faculty regarding faculty development sessions included in the questionnaire.

Results of the Needs Assessment Surveys

By assigning a numerical value to each descriptor of interest from one (1) for the most interest (Definitely Interested) through to a five (5) for the least amount of interest (Uninterested) I was able to quantify the interest expressed by faculty. Any mean less than three (3.0) meant there was an expression of interest. The results indicated that among full-time faculty the strongest interests were for faculty development opportunities in problem-based learning, active learning strategies, establishing rapport, evaluating student learning and courses, and teaching in small groups (see Appendix C-5). Part-time faculty expressed the strongest interest for active learning strategies, teaching in small groups, establishing rapport, and setting objectives.

Students' recommendations concerning teaching development sessions for faculty and residents are given in Appendix C-6. A rating of one (1) indicated the strongest level of recommendation and a rating of five (5) that the session was not advised. At the top of the student list for faculty was assessment techniques (finding out what students are learning) at 2.23, close to "Highly Recommended". Active learning strategies was ranked third (2.46) and teaching in small groups was seventh (2.76). These three session were integrated into our faculty development programs for the fall of 1996 and the winter of 1997. How the others sessions were incorporated into the faculty development program is described later in this chapter.

Appendix C-6 gives the student recommendations for faculty and residents. I have included it here to contrast the two. Students consider that residents do not need the same kinds of skills as do faculty. Residents do not need to know how to design courses or what problem-based learning is, but faculty do. Students also recognize that faculty need some training more

than residents. Assessment techniques, evaluating students, being sensitive to learning styles, and establishing rapport were also considered greater priorities for faculty than for residents. This collection of significantly different recommendations indicates that faculty are less in touch with students, perhaps less empathetic, than are the residents.

This difference between faculty and residents in being close to the students' learning needs may or may not be important. There are various interpretations and certainly more research would shed some light on the problem. It may be that the residents' own learning situation means that there is greater identification by the undergraduate students with residents. This may not mean that students will learn better from them. These differences between residents and faculty may mean the obvious, that faculty are out of touch with their students and therefore are unable to teach effectively. Perhaps there is some combination of these two conditions occurring.

Designing the Faculty Development Program

In this section I will describe the process of planning the faculty development programs we ran in the fall and winter terms of the 1996-1997 academic year. As alluded to, this constituted the planning stage of the action research cycle which was followed by acting - putting the program in place - and was preceded by observing and reflecting - the needs assessment and other preliminary research that we did.

TIPS

We continued with our plans to offer TIPS workshops four times per year, three times for faculty and once exclusively for residents, although TIPS generally received a low rating. This low rating may have been due to the misleading wording of the item which describing TIPS. It read, "basic teaching principles and techniques." Many faculty consider themselves to be good teachers already, so why would they need a workshop on the "basics?" If I had maintained the wording from the TIPS brochure, the wording we used in the flyer to advertise our fall program, -- "an intensive three day workshop on essential elements of effective teaching" -- there would likely

have been different results. Nevertheless, TIPS workshops remain the cornerstone of our faculty development programs. Throughout the year, 12 full days are scheduled for TIPS compared to seven full days for all the other sessions combined. TIPS is also evaluated more rigorously. In spite of the low rating given TIPS in the needs assessment survey, it has remained the single most important faculty development opportunity at the College.

Half-Day Workshops

Using the needs assessment information we created three half-day workshops for the fall term 1996 on (a) assessment techniques, (b) active learning strategies, and (c) teaching in small groups (see the faculty development program flyer in Appendix F). These had widespread support from both part and full-time faculty and were "Strongly" to "Highly Recommended" by students. In the second term we offered these same workshops as the attendance for them was encouraging (see Appendix C-7) and the responses from fall term participants was positive.

Overview. We decided to include a one and a half hour overview of teaching and learning, similar to the one used as the introduction of the TIPS workshops. It was offered as a one time required component for all the half-day workshops. In this short session we lead the participants through considerations of the central purpose of teaching, a definition of learning, and an introduction to adult learning principles. We found the overview to be an essential component to our program since it brought all our participants into the same framework for thinking about teaching and learning.

Assessment techniques. In this session we included a variety of ways that teachers could use to assess their own teaching. Sources of data were self, peers, supervisors, and students. The student data could be in the form of a diagnostic questionnaire or an appraisal of what they were learning and what their concerns were.

We discovered from the registration information that our intent for this session had been misunderstood by many of those registering. Upon close examination we discovered that we had unintentionally misled faculty to think that this was a session on evaluating student learning. Many faculty thought we meant evaluating student learning for purposes of reporting and grading rather than assessing student learning for purposes of improving teaching. At the actual sessions we

informed participants of the possible misunderstanding. To rectify the problem as much as we could we suggested that they feel free to leave and we committed ourselves to do a session on evaluating students the following term. No one left the session and they seemed to find the session worthwhile (see Appendices C-8 and C-9).

Active learning. This was the first of the half-day workshops we offered in the fall of 1996. We attempted to model active learning strategies as we explained them. We were disappointed with the registration. In the winter term we offered this session in March giving more lead time for registration which allowed those interested to arrange their schedule to accommodate their participation in the workshop. Registration was indeed greater in the winter program than in the fall. We are not sure if this change was a factor.

Teaching in small groups. This was a difficult session to prepare since conceptually it included everything about teaching just applied to small numbers of students. We concentrated on how to lead discussions and advertised this as our main focus for the winter term.

Other Possible Faculty Development Sessions

There were other ideas for sessions coming out of the needs assessment questionnaires. We did not incorporate all of the highly rated ideas in our faculty development program. In this section I provide a rationale for these decisions.

Problem-Based learning. Problem-based Learning was rated second overall by full-time faculty. We did not include a session on problem-based learning in our programs since the College curriculum review subcommittee was intending to organize such a session.

Rapport. Full-time faculty rated their interest in rapport a close fourth overall while part-time clinical faculty rated it third. This item was ranked sixth by students and they recommended this session to faculty significantly more strongly than they did to residents. It appears that students perceived that faculty needed to be closer to students and student learning than they were at that time. On reflection, we decided to include rapport and motivation considerations in each of the half-day workshops and in TIPS rather than treat them separately.

Since establishing the faculty development program we had requests from two clinical departments to make presentations about positive motivation for learning, the kind of climate or

atmosphere which is most conducive to learning. It also is the case that we have not highlighted the motivational implications of the teaching strategies which we are presenting in the half-day workshops as we had planned. This topic is being neglected in our program in comparison to both the interest the idea generated on the needs assessment and the interest faculty are currently showing. This topic needs to be given renewed emphasis.

Evaluating student learning and courses. Evaluating student learning and courses ranked high for full-time faculty by faculty, and moderately high by students, but was ranked low by part-time faculty. We did, however, decide to keep this topic in the fore by continuing to teach it in our TIPS workshops. We realized that many faculty who had attended our workshops in the fall term on assessment techniques were looking for assistance with evaluation of student learning. We therefore instituted a separate half-day workshop on evaluation strategies for the winter and spring terms of 1997. This workshop extended the very general treatment of evaluation given in the TIPS workshops. We also changed the wording of the description of the workshop on assessment techniques to more clearly indicate the focus on assessing one's own teaching for the purpose of improving one's practice.

Setting objectives. We also continued to offer instruction on setting objectives in the TIPS workshops. This session was was ranked low by full-time faculty, high by part-time faculty, and moderately high by students. Although interest was not high enough to justify a separate workshop, we deemed the topic of sufficient importance that we kept it in TIPS.

Adult learning. We considered opportunities to explore teaching adults in higher education to be a fundamental component of learning to teach. We therefore offered it in the introduction to the TIPS workshops and in the overview of teaching and learning described above. We continued to offer the overview of teaching and learning including adult learning in the winter and spring program.

Others. Both "teaching to large groups" and "developing courses" were ranked low by full and part-time faculty and we dropped these topics from our plans knowing that if the demand increased that we could offer these topics another time.

We did include instructional study groups in the program in spite of low ratings. We wanted to support those few faculty who were interested in doing some intensive problem-solving about teaching by building supportive relationships with others who were like minded. We

wanted to foster a supportive network of teachers through this group process. One faculty member noted on the needs assessment, "...share your ideas with others. We don't need instruction, we need communication." Instructional Study Groups began as a sequel for those who had participated in TIPS but, due to the low registration, we opened it up to any faculty wanting to talk about their teaching or teaching in general. We promoted this one-hour "teacher talk" at TIPS and half-day workshops. Much more attention is devoted to Instructional Study Groups in Chapter V.

Scheduling considerations

We brought our fall term program out in mid August 1996 which may not have given all faculty, particularly clinicians, enough time to arrange their work lives to attend the first workshops in September. One faculty member commented on the needs assessment questionnaire, "Any notices need to be sent 3-4 months in advance because clinicians book patients for clinics this far ahead." We distributed our winter and spring program information in mid-November 1996 which gave faculty over six weeks lead time before the first scheduled workshop and we plan to have our program for the fall of 1997 out in May of that year.

Other faculty members told us on the questionnaire, "Evening or weekend courses would increase the probability of many of my colleagues' attendance (sic)." and "most workshops are given during 'working hours.'" Fortunately, we had the resources to offer each of the workshops once during the work week and once on a Saturday morning in both the fall and winter-spring terms. The Saturday morning sessions have not been as well attended as those during the week.

Evaluation

We have conducted a brief evaluation of the faculty development program that we ran for the fall term 1996. A more extensive evaluation is a possibility for some other time in the history of our faculty development efforts. At this point, a more sophisticated evaluation of the program was not considered. The description of what we found and the action we took is outlined below.

Attendance at faculty development sessions. I held higher expectations for attendance and so was disappointed with the number of those who participated. In the fall I enlisted the support of department heads by requesting, at a Dean's meeting, that they encourage faculty to attend. Dr. Spooner had the flyer printed up on coloured paper and some enlarged versions posted on bulletin boards around the College and Hospital.

We have taken some additional steps to try to increase the level of participation for the winter program. We distributed our brochure advertising the program earlier than in the fall, thus providing faculty with more opportunity to arrange their schedules. We moved the Active Learning session from the lead session to later in the term so if the short notice was a factor, faculty would have much more lead time to register for this session. We are hoping that attendance will increase.

Participant satisfaction. Faculty have expressed satisfaction with the sessions that we have offered. They have given generally high ratings (see Appendices C-8 and C-9) and many have attended more than one of the half-day workshops and TIPS.

Some comments are listed below. The first four give an indication of how well the sessions were received and the other five suggest some improvements related to the delivery of content and information. Although these comments are representative of comments we received, they are not given proportionally. I have include many more comments about how to improve the sessions because they are more instructive.

1. "I am glad that I attended this workshop and will recommend it to my peers/colleagues."

2. "Well run. Good to keep it to 2 hours - not longer."

3. "The presentation by the organizers was excellent. The interactive approach is good and should be continued."

4. "The workshop stimulated me to improve my teaching skills and to plan for distributing an evaluation to my students post-lecture."

5. "I would have benefited more by being provided with more variety of different information."

6. "Too much time at the start on other things, before we got to the 'meat.'"

7. "The content of new ideas was modest. Handouts verbose and not informative - more

concrete preferable."

8. "Enjoyed basic approach. Would like more time for practical strategies."

9. "Good. Should we read on topics ahead of time?"

The comments amplified what I interpreted from the survey, that the workshops were well received. The comments with suggestions are all worth reflecting upon to make improvements for future sessions.

Discussion. The comments are consistent with the ratings given on surveys of participant satisfaction which indicated that faculty were very pleased with the workshops (see Appendices C.1 and C.2). The level of agreement with criteria of quality was above 'Agree' in all but one instance and in many places close to 'Strongly Agree'. The ratings of two of the three objectives common to all three half-day workshops were also high. Participants rated identifying appropriate strategies and making plans to use new ideas close to or above the 'Very Good' mark. These very positive ratings attest to the quality of the workshops.

As confirmed by the comments cited, the quality of the content and instructional materials received rating below other criteria. This situation, if addressed, could lead to the improvement of the workshops. Possible approaches are to revise the handouts into integrated booklets for each workshop, provide some prereading, and search for more suitable material. It is likely that all of these will be pursued.

Although we wanted these workshops to help build a network of peers interested in teaching, the ratings indicate that we were not succeeding as we had hoped. This led us to consider possible ways of creating such a network.

Summary of Chapter IV

The faculty development program at the College of Medicine has been anchored by the TIPS workshops. TIPS is an excellent program because it is meeting the needs of participants and is contributing to the advancement of teaching at the College. The College, however, needs

more faculty development to support its teachers in the challenging task of improving their practice and contributing to the education of the basic physician.

Based on our needs assessment, we decided that the half-day workshops would be suitable to complement and extend the TIPS workshops. Our initial information indicated that they are working relatively well. It is too early at this point in time to make definitive conclusions regarding the absolute appropriateness at the College of these sessions. I am more certain that they are worthwhile faculty development experiences and merit further investment of time, energy, and resources.

CHAPTER V

ORGANIZATIONAL AND SOCIAL SUPPORTS FOR TEACHING

In this chapter I examine the organizational and social supports for the practice of teaching. If we accept that teaching is a social practice (Overgaard, 1994), in the sense that the practice of teaching is governed by norms which are an integral part of the social environment and of the profession itself, then teachers need opportunities to surface, challenge, and change or reintegrate the norms of their practice. This is one of the reasons why we included times for teachers to talk as part of our faculty development programs.

Even with the activities of surfacing, challenging, and changing or reintegrating the norms which govern teaching, teachers need the support of colleagues and administrators (Bogdewic, Baxley & Jamison; Green, 1994). The institutional context of teaching is as important as the programs for faculty development in improving teaching. For that reason we began a program of enhancing academic leadership at the College of Medicine, a process of working through formal and informal faculty leaders interested in improving teaching. This is the fourth component of the framework for thinking about faculty development which I advanced in Chapter II.

In Chapter II, I identified three main sources of institutional support: faculty, department heads and senior administrators, and committees of faculty. In this chapter, I explain how these three sources of support operated at the College. I will describe what we did to strengthen these sources of support through workshops on academic leadership and engaging in instructional study groups. Finally, in the last section, I describe the part of the needs assessment which sought information about the organizational characteristics of the College of Medicine that we thought might influence teaching. This data will be used, along with other information, to form the basis of action plans to be implemented some time in the future.

Academic Leadership

The team decided that it would be worthwhile to provide faculty leaders at the College with an opportunity to learn about some of the educational and medical education issues facing the College. It was our expectation that action plans would be generated out of this learning process and eventually implemented. We heard faculty say that they needed more information and we ourselves could see that in the same way that faculty were not trained in teaching, faculty leaders had little or no training in academic leadership. This earlier activity corresponded to the stages of observing and reflecting in the action research cycle. We designed and delivered a two day workshop to meet that perceived need as part of the planning and acting stages of the cycle (see 6). The darkened sections highlight the planning and acting stages, and the outlined sections show that the cycle could continue and often does (and in this case did) with the subsequent evaluation of the workshops.

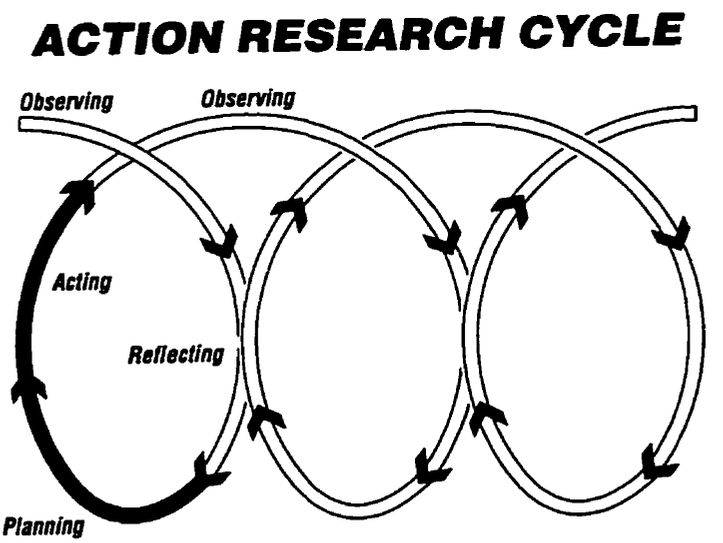

Figure 6. Academic leadership workshops: Planning and Acting stages of the action research cycle.

The observations of the program in action, which we made ourselves, as well as the perceptions of the participants, formed another observing stage. We followed up the observations with thoughtful reflections that led us to recommend to the Dean that we offer a slightly modified version of the academic leadership workshop again in November 1997. These developments are reflecting and planning stages of the action research cycle. The imminent acting stage is made up, in this case, by the November workshops. The cycle continues.

Sources of Support for Improving Teaching

There were several sources of support for teaching already operating at the College of Medicine before this action research project began. I outline what those were and by so doing give a prominent place to the on-going efforts of formal and informal faculty leaders at the College. It bears repeating that this action research project was just one more initiative in a series of undertakings aimed at enhancing instructional effectiveness.

Faculty. TIPS had been operating for a short time before with this study began at the College. Many of the faculty who had taken TIPS had become more vocal about their support for effective teaching. Although the support from faculty for teaching may have been growing, we wanted to continue to build momentum and in particular establish what Dr. Harding called "colonies" of faculty who were dedicated to teaching. This theme is expanded later in the chapter with a major discussion of Instructional Study Groups.

Educational Support and Development. As describe in Chapter III, Drs. Spooner and Harding in ES&D worked very closely with me. In many key ways they were researchers with me. They were a strong source of support for teaching. Through their activities, commitment, and enthusiasm, they promoted the importance of teaching at the College. I, too, helped in this regard. I met with individuals and groups of faculty and students. I made several presentations to whole departments of clinical faculty, and I appeared before the department heads at the monthly Dean's meetings on various occasions.

The Dean of Medicine. Since taking office in 1993, Dr. David Popkin, the present Dean, gave a great deal of support, both moral and financial, to faculty development in several important ways. Through his initiative the Academic Enhancement Fund of the College has financially

supported this particular study. He created the position of Assistant Director, Educational Support and Development (30% appointment) which has been renewed for a three year term, currently held by Dr. Harding. It was reported by Dr. Spooner that,over the past three years, the Dean made several comments, both in private conversations and in public, which indicated his understanding of the importance of, and his commitment to, faculty development. In conversations with the Dean and in meetings with department heads and with our team, I, too, observed the Dean make unequivocal statements in support of faculty development (for example, see Appendix 1, March 14, 1996). His support has been strong and consistent, recently evidenced by the creation of another full-time position in ES&D. This opening has been advertised and is expected to be filled by July 1, 1997.

Heads of departments. Several of the heads of departments were interested in improving teaching. One in particular had the practice of directly observing at least one lecture of every member of his department each year. Another department head implemented an advanced system of faculty evaluation. Many others had expressed their discontent with the present system of teaching. One department head had been personally recognized with teaching awards. There was generally a sense among the department heads that something needed to be done about teaching. Department heads continued to be supportive through this action research project as evidenced by their participation in the faculty development opportunities we offered including academic leadership.

Committee for the Development of Effective Teaching (CDET). This standing committee of faculty had been somewhat inactive following the time when it led the introduction of the system of student evaluations of faculty. However, the team recognized that this was the body of faculty which we needed to approach to begin building support for our increased efforts in faculty development.

In December 1995, when we called a meeting of the CDET to explain our project to them, it was not met with great excitement on their part. They did not understand what action research was and were confused that perhaps they would be called on to supervise a doctoral dissertation. We met with them a few weeks later with a proposal for the workshops on academic leadership which we were hoping they would see as an important learning opportunity for them in their role as members of the Committee for the Development of Effective Teaching. They did not. Two

months later the Committee fell into some temporary disarray and is awaiting revival. It was very much a team decision that the idea for academic leadership should not die with the committee and that we should go to the Dean without the sanction of the Committee. This we did and received strong support from him. We went on to propose the idea to department heads and they decided to participate.

"Academic Leadership" at the College of Medicine

There were several sources of support for teaching at the College. The workshops on academic leadership were designed to help faculty leaders continue to create and reinforce an organizational environment supportive of excellent teaching. We offered the seminar first to department heads and one other member of each department at the May (1996) department heads retreat. A second session of the first day of the program was given in June with the second days conducted in September 1996. The "Round" refers to a set of Day 1 and Day 2 together as a unit. Day 2 of the workshop in September was delivered on two separate days to participants who had been involved in either one or the other of the first day sessions. This is why under Round they are designated as both "One and Two." See Table 5 for the rather complex delivery schedule.

Table 5

Academic Leadership Delivery Schedule

Round	Session	Date	Location
One	Day 1	May 10, 1996	Willows Golf and Country Club
Two	Day 1	June 24, 1996	Royal University Hospital
One and Two	Day 2	September 19, 1996	Royal University Hospital
One and Two	Day 2	September 20, 1996	Kirk Hall, U of S Campus
Three	Day 1 & 2	November 17 & 18, 1997	Kirk Hall, U of S Campus

Relevance for the College. We saw that this program would be relevant to the College for two reasons. First, faculty leaders in the College needed to be better prepared to make sense of the information on faculty development that we were set to collect from the needs assessment and that was available in the literature. Furthermore, once these programs or processes were in place, leadership would be essential to encourage participation and create a climate conducive to the development of effective teaching. The active support of leaders in the College, including the Department Heads, we saw as pivotal to the success of faculty development efforts and initiatives.

Specific purpose and goals. The purpose of the program was to provide assistance to volunteer College participants for the development of academic leadership skills, knowledge and attitudes. Academic leadership is here considered to be leadership which creates and/or maintains an organizational climate conducive to the continual improvement of teaching according to the review of the literature found in Chapter 2. There were four specific goals for this initiative to develop academic leadership at the College:

1. To meet the needs of College personnel for knowledge, skill development and greater understandings about supporting effective teaching.

2. To provide learning opportunities which honour both current research as reflected in the literature and the prior learning and experiences of the participants.

3. To model leadership styles, effective faculty development strategies and to demonstrate various instructional strategies.

4. To encourage informed discussion about challenges, opportunities and problems at the College identified by the participants which are related to the support of effective teaching.

Topics. The following is a list of topics which were presented at the academic leadership program. Both the selection of topics and the manner in which they were presented were designed to contribute to the achievement of the goals outlined above.

> Issues in Medical Education: the issues and challenges facing medical schools currently and the background on these debates including problem-based learning, adult learning styles and preferences, active learning, above-average achievement of our students on qualifying exams, and the controversy over the lecturing method.
>
> Educational Change: the forces which drive and stall change efforts through the various phases.

Models of Faculty Development: conceptual and empirical models with emphasis on the match between the purposes of faculty development and the strengths and weaknesses of each of the models. An understanding of those presently available will be stressed.

Motivation: the nature of motivation, intrinsic and extrinsic rewards, motivation patterns of faculty.

Supervision: the exercise of leadership and the supervisory role in developing effective practice.

Faculty Evaluation: what works and what does not, different systems commonly found on college campuses.

Issues in student learning: cognitive stuffing and transfer of learning.

These topics were not considered to be an exhaustive nor obligatory list. Changes in topics for upcoming workshops were a distinct possibility.

Evaluation of Academic Leadership

The following criteria for success were derived from the purposes and goals of the program and determined the aspects of the program which could be observed for evaluation.

1. Participant satisfaction with the program (both immediate and long-term).

2. Reports by self and others of changed practices in supporting the development of effective teaching.

3. Increased formal and informal dialogue about teaching among participants following the program.

4. Increased levels of participation by faculty in instructional development opportunities.

5. Positive changes in student evaluations of teaching; more sophisticated teaching dossiers from faculty.

6. Interest on further sessions to explore other topics related to supporting the development of effective teaching such as communication, power and authority, groups and teams, vision/ mission statements, teaching and learning strategies and styles, curriculum, new faculty member orientation, needs assessments, juggling the many roles of 'department head', dealing with poor teaching performance, hiring for instructional excellence etc.

The data collection for this particular initiative was more difficult than other programs and did not lend itself to quantifiable measures in the same way that evaluating specific teaching behaviours did. Up to this point, the data consist predominantly of impressions of participants collected through interviews and questionnaires. Interviews, surveys, observations of changes in the profile of teaching at the College will need to be undertaken to determine if this program has had a measurable effect on the environment at the College.

Participant satisfaction. Those who attended were generally pleased with the seminar and there was some enthusiasm expressed after the first day to continue with the second day. This was a positive yet representative comment made about the June, 1996, version of Day 1: "Informative/stimulating. Excellent opportunity for group interaction. Got me thinking about new concepts and approaches some of which I may be able to apply to my own program." Participants found the sessions to be well prepared and readings useful for understanding medical education (see Appendix C-10)

Day 2 was more specifically directed at learning about team work, faculty development, supervising teaching, and instructional strategies. Participants reported that the second day was more practical (see Appendix C-10) and "had less loose ends." The following comments were selected to reflect the higher level of satisfaction with Day 2 than Day 1:

> "Very good! The day was well organized. This was very beneficial for me. I have spent a lot of time in this area but find that this was better than I thought it might be."
>
> "The program was very well designed. The reading materials were excellent and very timely. This was a good day. Faculty need to be encouraged to take this course."
>
> "Found this session to be more valuable and practical than session 1."

Although the ratings by participants hovered around "Agree" regarding the contribution of the readings to their understanding of medical education, there were many comments following the May, 1996, edition of Day 1 that there was too much to read too quickly right after lunch. This comment summarizes the problem well: "Afternoon reading and evaluating papers was difficult given time constraints and my running out of steam! Good papers, though."

Adjustments were made for the second round of Day 1 and are still being redesigned. Finding the right mix of information and discussion was not a simple task; we are still learning.

Evidence of changed practices. Observations and semi-structured interviews have not produced any convincing evidence that the Academic Leadership seminar has, up to this point, had a discernible impact on the operations of the College (see Appendix 1, August and November 1996). Many of those interviewed only a few months after the seminar had trouble recalling the topics discussed. One young faculty member thought that change would happen not due to the influence of those who had attended the seminar, but as a result of retirements by some of the older faculty who seemed to be holding up progress. One faculty member thought that faculty were ready to engage in action planning in November, 1995, and that the academic leadership workshops were not a necessary precondition for such an inquiry into the educational challenges faced by the College.

It may be that the focus of academic leadership ought to have been on the department level instead of on the College level. With the importance given to the department and department head in the literature and the various needs of the different departments at the College, academic leadership may perhaps have created more tangible results if greater attention were given to the operations of the departments. A College focus may be too broad and hence less effective than targeting the department. Thus ES&D may consider developing a departmental review of the organization of teaching.

Was this experiment in offering workshops about academic leadership a failure? Even if the goals of the program were not achieved, it is possible to learn from this experience. If we have learned something that could advance the cause of faculty development, then the experiment was not a failure. And we did learn something, as outlined above. There were, however, some unintended but real benefits to the program on academic leadership.

The seminars provided an excellent opportunity to identify those who were interested in the educational mission of the College. From this pool of possible candidates identified by their attendance at the workshops, a senior administrator from the Dean's office was able to approach several faculty to work on or chair educational committees. He disclosed to me in interviews that this was a very important benefit to him and to the College.

The Dean, himself a participant in the workshops, felt that the workshops were

worthwhile. He indicated that faculty were also telling him that the workshops are worth supporting. The Dean expressed the view that it was a major benefit for faculty to come together to get to know each other and to begin to discuss and wrestle with some of these issues around teaching and learning. As Dr. Spooner pointed out, the days were a wonderful opportunity to have so many faculty leaders together to "talk things educational."

These workshops on academic leadership may also have been a part of a cumulative effect. As Seldin (1990) points out, changing the climate of an institution is a painstaking administrative challenge and is not accomplished with one heroic effort, or with one workshop on academic leadership. Together with other initiatives, the Academic Leadership program possibly helped to raise the profile of the teaching role and make effective teaching more important. These other initiatives were the faculty development programs, the 1995 allocation of Dr. Harding to ES&D, the initiation of the action research project with the needs assessment, and others previously begun at the College. It may not have been crucial to the success of our efforts that a particular program was delivered. The important factor may have been that we did something, anything, to raise awareness and make people think about "things educational." Although I cannot conclude this with any degree of certainty, such speculations could form the basis of interesting hypotheses for future research.

Increased interest in faculty development. It is very hard to judge whether or not there was increased interest in faculty development as a result of the academic leadership program. We did not make an effort to answer this question directly but may do so in the future.

It is possible that the department heads will invite us to deliver another full day workshop around a different focus of academic leadership at their spring retreat. If they do show interest again, we might be able to conclude that the initial two day workshops begun in May 1996 helped generate some concern for issues in academic leadership.

Action Planning

Action planning had been anticipated as one of the outcomes of the seminars on academic leadership. The information and discussions that were a part of the academic leadership workshops were supposed to equip faculty leaders to seek and plan for changes. I had predicted

that in the afternoon of the second day of the seminars faculty would want to engage in dialogue about making some changes at a departmental or college level. In fact, only two people wanted to begin action planning; the vast majority wanted further individual development with topics such as supervision of teaching, faculty development, and instructional models.

Our team therefore convened a separate action planning process which began in November, 1996, with a full day and continued with two morning sessions in December, 1996, and one in January, 1997. We invited all those who had participated in Academic Leadership as well as all department heads (most of whom had been to the workshops) and other faculty leaders we though might have an interest in changing the educational system of the College. We hoped that out of this action planning would come some appropriate ideas for ways to improve teaching with sufficient commitment from enough faculty to result in real change at the College. Action plans were set and, at the time of press, at least one had been partially implemented. This initiative can also be represented using the Action Research Cycle (See Figure 7) with the acting and following stages in outline form representing the ensuing steps of the cycle.

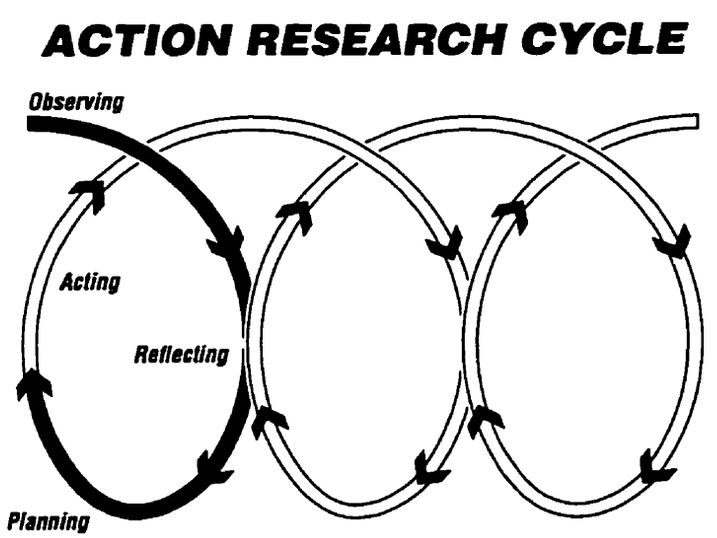

Figure 7. Action planning: Observing, Reflecting, and Planning stages of the action research cycle.

Summary of "Academic Leadership" at the College of Medicine

Both the literature and the observations made at the College of Medicine led me to conclude that there was a need for the development of academic leadership at the College. We therefore introduced a two-day workshop we called Academic Leadership that was attended by department heads, senior administrators, and other faculty leaders. Participants were very pleased with their experiences at the workshops. We have not yet found, however, any evidence of substantive changes taking place at the College as a result of the workshops on academic leadership. We think that perhaps they have been part of a growing tide of interest and action in support of effective teaching and that this swelling sentiment may be more easily detected in the time ahead.

Instructional Study Groups

In this section I will explain Instructional Study Groups (ISG) in detail. They are one way to create and sustain the necessary social and organizational supports needed to improve teaching. ISG are practical embodiments of the components of the framework for thinking about faculty development which I established in Chapter II. I will first present some further theory which explains more fully their potential to assist learning, and then describe what was done at the College to initiate ISG.

The Promise of ISG

Changing practices, both for the individual and for the organization, is arduous, time consuming, and challenging work. The problems encountered when teachers attempt to implement new strategies and approaches are many, complex and often unexpected in kind or degree. It is at this point of the faculty development cycle that success or failure is realized (Guskey, 1995). Eble and McKeachie (1983) found that although some one-time workshops produced lasting effects, follow-up activities were sound practice for increasing the chances of

continuing positive effects. They note that collaborative work undertaken with other faculty at the institution was more likely to produce change at much less cost than other, more popular options.

The challenge is not simply to make teachers aware of and able to comprehend certain new educational practices but to lead a process which will result in acquiring a habit of proficient skill that goes beyond awkward mechanical use to routine familiarity or even expert use (Hord & Hall, 1987). In other words, faculty development must promote, facilitate, and consolidate change as in a competency orientation. This requires developmental opportunities which attend to change as a process, a social learning process, not an isolated or single event (Guskey, 1995, Hall & Hord, 1987). Study groups can be effective mechanisms for such extension and implementation (Francis, Hirsh & Rowland, 1994) and are consistent with field theory's emphasis on the group commitment (Marrow, 1977).

Study groups of faculty do indeed provide one approach to supporting and extending professional learning. They can facilitate inquiry into teaching, which, according to Bland (1980) is a "critical element" in faculty development. "The development of an inquiry approach in faculty (experimental mind set towards their own educational responsibilities and practices) results in higher student ratings of their teachers' abilities and does, in fact, increase faculty behaviours that facilitate student thinking" (p. 36).

Eble and McKeachie (1983) note that, while faculty preferences may be for high-cost, individual faculty development opportunities such as sabbaticals and conference travel, "curricular change, workshops, and other programs involving faculty members working together to achieve common objectives may be more cost-effective for the institution in terms of their impact on student learning" (p. 205). Tucker (1984) recommends that faculty development efforts begin on a small scale but include the potential to reach large numbers of faculty. "A well-planned activity for a small group of interested faculty members is more likely to be successful than a large-scale, general effort, which may suit no one. A low-profile, low-key approach keeps expectations at realistic levels and provides a better basis to begin working with faculty members.... A small group of satisfied and motivated volunteers will soon set an example for their colleagues" (p. 135). ISG can be an important and effective transfer strategy that can contribute to increased performance.

A Description of ISG

I will propose my own definition of study groups and proceed on that basis. Instructional study groups are groups of educators studying their individual and collective knowledge and beliefs about teaching and learning together. To be most effective they are regularly scheduled, have voluntary membership, focus on the teaching/learning process, and adhere to a democratic style of internal functioning (Makibbi & Sprague, 1991). The study group can occur spontaneously or can be formally organized. The important element is that teachers are exploring their practice together.

Study groups vary in their structure from informally operating collectives to highly formal and intense groups aiming for strict fidelity to a new practice or approach (Guskey, 1995; Hall & Hord, 1987). It is quite possible that a particular group would, at times, change form and focus as it seeks to meet the various challenges of its members.

Cognitive Processes Influencing Learning

One of the reasons for the confidence which we have in study groups is based on what we know about how people think and learn.

Cognitive filters. The knowledge and beliefs which teachers have about teaching and learning affect how they perceive and eventually act on pressures to change their teaching (Borko & Putnam, 1995). These act as filters which affect change at the classroom level and are therefore themselves the object of change efforts: "Successful professional development efforts are those that help teachers to acquire or develop new ways of thinking about learning, learners, and subject matter" (p. 60). This is consistent with the social practice view of faculty development (Overgaard, 1994).

Organizational limits to learning. The organizational setting creates certain possibilities and also sets certain limits for change through the operation of commonly held norms and mutual expectations (Little, 1981; Overgaard, 1994). Furthermore, these norms, perceptions and beliefs may be deeply buried and not easily identified. The task of surfacing, confronting and possibly changing the norms which govern the practice of teaching is most effectively done in a social

setting characterized by frequency of interaction, strong peer role models, and clear expectations for collegiality and experimentation (Brookfield, 1986; Johnson, 1970; Little, 1981; Smylie, 1995; Tillema & Imants, 1995). "A heterogeneous group reflecting, conversing, debating, and experimenting together is a powerful device for intimacy, mutuality, mastery, and, in the best cases, a resocialization or rebonding to their professional guild (Huberman, 1995, p. 219).

The role of practical problem solving in learning. The thinking which takes place in study groups is interwoven inextricably with the physical, conceptual, and social context of the problems (Rogoff, 1984). "Effective practical problem-solving may proceed by using tacit knowledge available in the relevant setting rather than by relying on explicit propositions" (p. 7). This tacit knowledge can be considered to be the collective wisdom consisting of knowledge, beliefs and norms which bear on the teaching/learning process. The context activates this tacit knowledge, information, and resources which then facilitates the solution of the salient problem(s). A full and systematic consideration of all the options would be too time consuming and less effective. In practical everyday problem solving, it may be more important to be approximately right than precisely late. One goal of professional development then, can be seen to be the improvement of practice by 'retooling' for more effective action, by replacing or upgrading the tacit knowledge which will result in a higher degree of effectiveness. Another would be the continual reassessment of this store of tacit knowledge in light of observations of the effectiveness of professional practice based on such knowledge. Brown, Collins and Duguid (1989) wrote: "Communities of practitioners are connected by more than their ostensible tasks. They are bound by intricate, socially constructed webs of belief, which are essential to understanding what they do (Geertz, 1983)" (p. 33). This rethinking of tacit knowledge is efficiently done in a study group where a social context structures and guides the cognitive activity of the participating individuals in their adaptations to new intellectual tools and skills (Overgaard, 1994; Rogoff, 1984).

Gallimore and Tharpe (1990), building on the work of the Russian psychologist Lev Vygotsky, proposed that learning takes place in "activity settings." Activity settings are places where teaching and learning occur: the places, conditions, environments and constraints in which specific learning takes place. They are places of collaborative interaction, intersubjectivity and assisted performance (Gallimore & Tharpe, 1990). Activity settings are composed of personnel, occasions, motivations, goals, times and places but are not easily reduced to the sum

of these. Activity settings for faculty would include committees, peer consultation groups, workshops, individual consultations with outside experts, professional meetings, curriculum revision groups, work retreats, teaching and research situations in which they work, workshops they might attend, and even instructional study groups.

Instructional Study Groups at the College of Medicine

In the following section I outline what has happened at the College of Medicine with these groups of teachers examining their practice together. The deliberations about ISG were the stages of observing and reflecting in the action research cycle. Their initiation in the fall of 1996 represented the first planning and acting stages. Our evaluation of the groups represented the stages of observing and reflecting once again. Deciding to make some changes and offer ISG again means we have done more planning and acting. Our subsequent evaluation will continue the cycle and lay the ground work for ISG being offered again. Figure 8 outlines the parts of the action research cycle that were involved in the work around ISG.

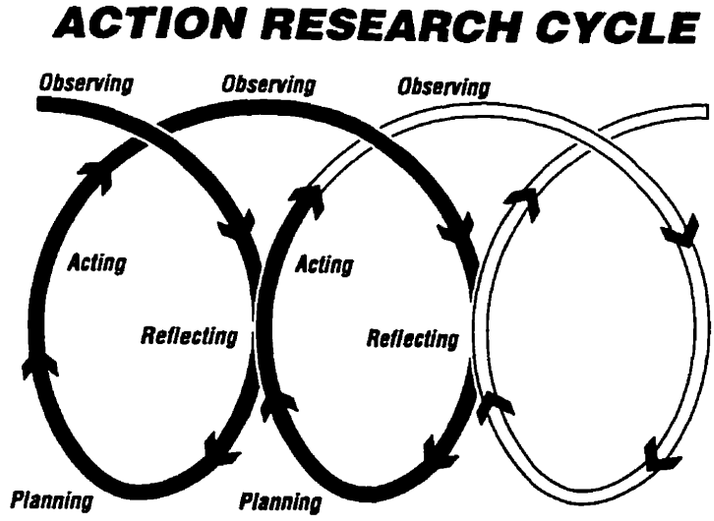

Figure 8. ISG at the College of Medicine: Observing, Reflecting, Planning, Acting, Observing, Reflecting, Planning, and Acting stages of the action research cycle.

Origin of the Idea for ISG

During team discussions, the idea of establishing small groups of interested faculty in thinking about teaching quickly emerged. These "colonies," as we called them then, were to bring together faculty members who were eager to improve their practice and to lend each other encouragement. They would be supported but not necessarily chaired by an educator who could assist with resources and possible directions for inquiry or ideas. As we became convinced of the need and feasibility for such a group, Dr. Harding thought to include the idea in the TIPS workshop of February 1-3, 1996. There, we were able to interest some faculty in this idea for ongoing, group-directed developmental activities aimed at enhancing teaching talent. We decided to pursue the idea further.

Implementation

ISG were based on participating faculty being prepared (a) to learn about teaching, (b) to honour individual teaching accomplishments and developmental preferences, and (c) to give support, suggestions and encouragement to fellow faculty. An educator was to take on the role of resource person who would (a) listen to faculty express their situations, concerns and ideas; (b) make pertinent suggestions for resources or strategies to meet the expressed needs; and (c) give advice when asked. Rather than lecture or lead the discussion, the educator was to leave the leadership of the ISG with the faculty members themselves.

The presentation at a TIPS workshop outlined the nature of the group including the guiding principles, asked for suggestions that might better meet the needs of the faculty there, and discussed guidelines for meeting. We planned to open this opportunity to faculty who had been to a TIPS workshop and possibly to approach others whom we thought might also be interested.

After the TIPS workshop, Dr. Harding and I collaborated on summarizing the small group deliberations and created a description and response form for faculty. We distributed this summary to those who had helped in its formulation and asked for confirmation or concerns. We then sent the information and response form to all those from the College of Medicine who had

participated in a TIPS workshop to solicit members. There were only one or two individuals who had expressed an interest in such a group on an ongoing basis.

When we built our faculty development program for the fall of 1996 we dropped the stipulation of regular attendance and included two opportunities for TIPS participants to attend instructional study groups. Three people registered, two attended, none of them from TIPS. Undaunted, we offered the instructional study groups again in the winter 1997 program, opened it up to all faculty, and set four regular Friday afternoon meeting times. We also promoted the discussion groups at the half-day and TIPS workshops during the fall of 1996 and on into 1997

Evaluation of ISG

One might wonder why we were continuing to promote the instructional study groups when the response has been so low. I will suggest three reasons. First, it is because the payoff is likely to be of great value. The literature is quite persuasive on this point. ISG make sense in terms of the framework for thinking about faculty development. Second, the sessions only last about one hour and require no preparation or expense. They are very easy to conduct compared to the immense preparation required for workshops. Third, the ISG sessions that we have conducted worked quite well and for the four faculty members that were present we seemed to achieve something worthwhile.

At one ISG conducted during a TIPS workshop we observed two faculty members make the discovery that they had been, in some respects, "showing off" what they knew to the students instead of trying to teach them. I do not expect such profound self-discovery at every session, but do anticipate growth on the part of those who attend.

Needs Assessment of Organizational and Social Forces That Support or Impede Teaching

The part of the needs assessment that I will describe and discuss examined the organizational characteristics of the College of Medicine. In Chapter IV, I reported on the needs

assessment for faculty development sessions which was an element of the observing and reflecting stages of the action research cycle. We collected a data set, reflected on it, and built a faculty development program using that important information.

This organizational and social appraisal of the situation at the College has not yet helped inform any specific action. Perhaps informally it has been used in the action planning sessions described earlier in this chapter, but no formal planning and acting considerations have been attempted using these data. Further reflection is required, and perhaps more data collection as well, before entering the planning and acting stages of the action research cycle that has been based on this part of the needs assessment.

Rationale

The needs assessment survey sought information on organizational and social characteristics of the College which we thought might facilitate or impede effective teaching. The needs assessment was founded upon field theory which conceives of human behaviour as an interaction between the individual and the social environment in which the individual acts (Guest, 1984; Lewin, 1952). According to field theory, the most useful strategy for change is to use the group context to alter the individual's values and commitments, since the group commitment acts to increase the facilitating forces and reduce impediments to change (Guest, 1984). The results of this survey provided information for reflection.

Design of the Needs Assessment

We designed this part of the needs assessment instrument on the basis of our own best understanding of faculty, the College, and motivational factors in higher education. These were developed from first hand experience of Drs. Spooner and Harding and from familiarity with the literature on medical education and teaching in higher education. We also conducted several interviews with full and part-time faculty to obtain a wider perspective on the factors influencing effective teaching. This part of the needs assessment survey was developed at the same time as the part which addresses faculty development. Appendix D contains both parts of the needs

assessment questionnaire.

Distribution

As I reported in Chapter IV, we distributed the questionnaire to 218 full time faculty from all departments in the spring of 1996. Two reminders were sent out and we eventually received 90 responses for a rate of over 41%. At the same time we distributed a similar questionnaire to 98 of the most active part-time faculty using self-addressed, stamped envelopes. We received 51 responses for a rate of 52%. The response rates are sufficient to provide a degree of confidence in the results. Other reasons which give us confidence in the results such as the demographic information, the proportion of those who attended TIPS, and the workweek of faculty were also explained in Chapter IV and substantiated with Tables 7 and 8 in Appendix C.

Impediments to Effective Teaching

We wanted to identify some of the barriers to effective teaching. From this information we would then be able to take some action to minimize their impact or eliminate them altogether.

Weimer (1990) identifies a number of forces which may make the improvement of teaching difficult. These forces are faculty attitudes and beliefs, organizational constraints such as declining resources and a tendency to cling to the "research model" of medical schools, and feelings of insecurity when confronted with programs to improve teaching since some faculty have been victimized from ill-conceived and implemented evaluation systems.

I have organized the specific items that we developed to reflect Weimer's (1990) classification. The attitudes of faculty about teaching that we wanted to explore at the College covered cognitive stuffing and the purpose of teaching (see items 6, 7 and 8 in Appendix C-11). The organizational constraints we decided to investigate dealt with administrative decisions based on teaching performance (tenure, merit pay, promotions), the use of teaching dossiers, lack of time to devote to teaching, and financial disincentives (see items 1 to 4 in Appendix C-11). We also wanted to examine the faculty response to the system of students evaluating faculty teaching (item 5, Appendix C-11).

Discussion of Impediments to Effective Teaching

Several important barriers to effective teaching were identified by the needs assessment. They are (a) the little attention paid to teaching in administrative personnel decisions, (b) lack of time, (c) evaluation of teaching, (d) financial concerns, and (e) attitudes of instructors.

Scant consideration in administrative decisions. Faculty, both full and part-time, agreed that teaching was given scant consideration in promotion, tenure, and merit pay decisions as compared to research. The mean ratings of this item by both full and part-time faculty were 1.98 and 1.93 respectively (See Appendix C-11) which is a score close to "Agree". Teaching dossiers, the method by which teaching accomplishments are communicated to the College Review Committee, were reported to be extra work with little reward. The conclusion is that one of the factors which stands in the way of effective teaching is the perceived lack of tangible rewards distributed as a result of teaching excellence.

This finding was confirmed by a number of sources. Basic science department heads, who met with Dr. Spooner in January, 1996, to try to answer the question, "What does the College need to try to improve teaching?", decided that this lack of reward was a serious problem at the College. Dissatisfaction with administrative decisions regarding the reward of teaching have been made in informal conversations that I have had at the College and is also considered a problem by Drs. Spooner and Harding. One full time faculty member commented on the needs assessment, "Teaching, particularly undergraduate teaching, is obviously not highly regarded and hence unnoticed by University administration, hence has little chance of improving." Another faculty member wrote, "I agree with the statement (about teaching receiving scant consideration in promotion decisions) but disagree whether this has any impact on teaching effectiveness." There is a perception that teaching does not count in administrative decisions, but there are mixed views about the impact of this situation on teaching.

Failure to allocate time to teaching. Another difficulty which faces the College is the lack of time available to faculty to work on their teaching, either to attend workshops and improve, or simply to put in the effort to do a good job. This is another way of saying that faculty lead very busy lives and it is difficult to make the time for an activity which is not heavily rewarded or perceived to be an integral part of their contract. Both full and part-time faculty agreed with the statement about

lack of time to improve teaching with a mean of 2.07 and 1.98 respectively. One part-time faculty member wrote, "Time demands make this (faculty development for teaching) a lower priority than other CME (Continuing Medical Education) activities."

It is my interpretation that it is not the lack of time which is a problem. We can never increase or decrease the amount of time available to us. The problem is in the allocation of the time, a decision which individuals make but which is influenced by the social environment, as well as by economic and other considerations. A full time faculty member commented on the needs assessment form, "With three research grants I have to budget my time for teaching quite restrictively." Perhaps if teaching were recognized more, were rewarded more directly, and were held to be an important faculty function by both faculty and administration, faculty would allocate more time to pursue excellence in teaching. This speculation could form the basis of another hypothesis in an ongoing action research cycle.

Evaluations of teaching. As I wrote in Chapter I, the College of Medicine has two systems for the evaluation of teaching. One is based on student evaluations and the other is the use of the teaching dossier as a method of self-reporting for administrative decisions. Faculty seem to be divided on the efficacy of student evaluations to improve teaching. The mean ratings were 2.46 and 2.54 for full and part-time faculty respectively (see Appendix C-11). The frequency distribution for full time faculty was almost equal across all four indicators of agreement Strongly Agree, Agree, Disagree, and Strongly Disagree). Comments from faculty reflect this division of opinion. One full time faculty member wrote on the needs assessment questionnaire that he (or she) considered student views of teaching to be "popularity" contests "based on student pampering" by the instructors. Another wrote that student evaluations were "highly subjective" hiding behind apparent "facts". One expressed an opposite opinion: "The most valid assessments of one's teaching ability are those coming from the students." The comments and ratings of faculty indicate that the opinion is evenly divided about the validity of student evaluations of faculty teaching.

Faculty were quite clear in their response to teaching dossiers. The mean response was close to agree for the statement, "Dossiers are extra work with limited support or reward" (see Appendix C.11). There was a perception among faculty that teaching dossiers were not effective.

Financial disincentive. In responding to the question about the financial disincentive in

teaching, faculty expressed less than full agreement. Both full-time and part-time faculty rated the statement at less than "Agree." This came as a complete surprise to the team. Basic science faculty need to devote time away from research which is sometimes covered by lucrative grants. Clinical faculty must take time out of clinical practice to teach, with financial consequences for them personally and for their departments. Part-time faculty (all physicians with private practices) must do the same and the money they are given by the College is a fraction of their overhead expenses. One part-time faculty member made this observation, "Good teaching requires time more than anything. Time to prepare, time to interact with students and review material. Unfortunately, taking this time away from practice can result in serious financial strain. Remuneration must be increased for this important job." Furthermore, most clinical departments finance their teaching out of clinical earnings by their faculty. To take time away from lucrative pursuits does represent a financial strain that some departments may not encourage.

On the other hand, we know that faculty teach and that they are relatively highly motivated (Committee on Accreditation of Canadian Medical Schools/Liaison Committee on Medical Education, 1995). It may be that faculty are motivated by other rewards of teaching, those more intrinsic as described below, and not by the financial incentives. In the section on motivation I will discuss the hypothesis that intrinsic rewards are stronger than the financial disincentives. A part-time faculty member told us, "In private practice the motivation to have students is #24-26 (intellectual stimulation, personal learning, contributing to society). Financial reward etc. is not relevant."

Instructor attitudes. We know that there is a vast amount of material that students need to learn. We also know that teaching is predominantly lecture style. These two factors together create cognitive stuffing. The interpretation of item 6 regarding cognitive stuffing (see Appendix C-11) is that there are other factors preventing teachers from moving away from lectures. The mean ratings of 2.71 and 2.70 for full and part-time faculty fall between "Agree" and "Disagree" and are not conclusive. They do not tell us if the amount of material is a factor or not. In future renditions of such a needs assessment questionnaire, this item will need to be expanded to ask faculty what they believe to be the factors preventing them from trying a teaching strategy different from the lecture.

Results from the faculty survey showed that they disagreed with the statement that they

emphasized remembering facts (mean ratings of 3.00 and 2.98 -- close to "Disagree"). This contradicts what we have learned about medical education and what Drs. Spooner and Harding believe to be the case at the College of Medicine. A possible explanation for this seeming contradiction is that faculty intentions and their actual performance differ (Lucas, 1994). Data are being collected at the College to confirm this explanation. We are asking faculty taking TIPS to respond to our questionnaire about the frequency of model teaching behaviours immediately at the start of the workshop. We are comparing how they rate themselves on the 'then - after' questionnaire several months later to compare their "before" ratings both before and after TIPS. Early indications are that faculty have adjusted their self-evaluations of their previous performance downwards following the TIPS experience. This belief that they are already good teachers stands in the way of faculty improving their teaching practices.

The results from Item 8 indicated that faculty did not feel that they were "grandstanding" when they teach. The mean ratings of 3.20 and 2.91 hover around "Disagree". This was surprising based on the revelation of two TIPS participants at an instructional study group session. On the other hand, it was not surprising since faculty could have rated this item "Strongly Disagree;" the mean ratings suggest that there is an element of grandstanding in some of the teaching that faculty do.

Motivators

We also wanted to identify some of the motivators which faculty experienced in their teaching. From this information we anticipated being able to take some action to maximize their impact at the College. We included statements related to the rewards of teaching in our needs assessment questionnaire.

Motivators are objects or beliefs in the environment which stimulate effort or action and can be either intrinsic or extrinsic (Baldwin & Krotseng, 1985). Intrinsic incentives include the opportunity to contribute to student development and intellectual stimulation. Extrinsic motivators comprise environmental factors such as peer and administrative expectations and recognition from colleagues and others.

We wanted to find out the strength of several intrinsic and extrinsic motivators that we

thought were operating at the College. Appendix C-12 reports the mean ratings given on statements of motivators. Items 1 to 4 were designed to provide information about intrinsic rewards of intellectual stimulation, personal learning, and witnessing student learning. To Baldwin and Krotseng's (1985) list we added assisting in the education of the next generation of physicians as a positive contribution to society. Items 5 to 9 tested several extrinsic motivators such as expectations for teaching excellence and recognition for teaching, both formal and informal.

Discussion of Motivators in Teaching

There are two classes of motivators which were identified by the needs assessment. Both intrinsic and extrinsic motivators are discussed in the following section with considerations of the possible implications and the need for further research in the area.

Intrinsic incentives. The statement which faculty agreed to with the greatest strength was that regarding intellectual stimulation from teaching graduate students or residents. The means score for full-time faculty fell between "Strongly Agree" and "Agree" at 1.43; for part-time faculty it was closer to "Strongly Agree" at 1.24. Intellectual stimulation was ranked first overall by both groups of faculty. The second ranked motivator concerned making a positive contribution to society. Full-time faculty rated this above "Agree" at 1.63 and part-time faculty agreed more strongly with a mean score of 1.39. The third strongest incentive for both full and part-time faculty was related to contributing to and witnessing student learning with mean scores of 1.63 and 1.54 respectively. The fourth rated motivator referred to undergraduate teaching being a vehicle for the teacher learning the material to a higher degree. Full-time faculty agreed with a mean of 2.00 and part-time faculty with a mean of 1.94.

It is important to notice that the top four statements can be classified as intrinsic rewards of teaching. They all are rewards derived from the act of teaching itself: intellectual stimulation, personal development, contributions to society, and witnessing student learning. A part-time teacher noted, "Student participation and willingness to learn encourages teachers more than money." These intrinsic rewards of teaching were the strongest motivators for both full and part-time faculty.

Extrinsic incentives. Other motivators were not perceived to be as powerful. For example, recognition by other faculty was rated at less than "Agree". Collegial expectations for excellence in teaching, both formal ones emanating from the administration, and informal ones coming from among faculty themselves, were rated below "Agree." Finally, at the bottom of the list, was the incentive provided by awards for teaching. These extrinsic rewards were not rated as highly as the intrinsic motivators.

Implications of the data about motivators. This portrayal of motivators operating at the College is a picture of the present reality, not of how things should or could be. It may be that opportunities for recognition and awards are poorly managed or inadequate to provide any real incentive to teach well. It is possible that applying some energy and resources in those areas may increase the motivation for teaching among faculty. Faculty commented on the needs assessment form, "College awards are not available to most of us unless we teach medical students;" and "There are few awards. If there were more, they would be an incentive." If this last statement were true, the College might be able to capitalize on the awards presented to teachers by increasing the visibility and distribution of the awards already in place. Baldwin and Krotseng (1985) write, "The key to faculty vitality is to discover the types of incentives that are most attractive to faculty members and that will most economically and effectively stimulate professors' best work (p.11)."

These speculative comments could become a working hypothesis put into place as part of the continuing action research cycle. These observations must become the objects of informed reflection and then perhaps some positive changes can be planned and implemented, then observed and analyzed. The results of the needs assessment can provide the beginning to a rich action research cycle.

Further research. In order to discover the best incentives to motivate faculty at the College we would need to know the range of options available and the circumstances which affect their value. Two dimensions for each of the options need to be addressed: (a) the value attached to each option by faculty and (b) the availability of the incentive to faculty. With this information, adjustments to motivators could be undertaken with greater confidence. For example, faculty might indicate that College awards are very valuable but unavailable. This would lead to the conclusion that making the awards more accessible would be of benefit. On the other hand, if

College awards were not rated as high incentives then changing the distribution of the awards might not make any difference to faculty motivation. There is certainly much more to learn about motivators and incentives.

Differences Between Faculty By Years of Employment

One of the interesting relationships that we noticed in exploring the data was the differences between faculty when compared by years of employment at the College. In this section I will outline our findings and their possible implications.

Needs assessment analysis. There were some significant and intriguing differences in the interest expressed by full time faculty in faculty development sessions between those who had been employed less than 10 years at the College and those who had been employed for more than 10 years at the College (See Appendix C-13). For every type of session suggested, those employed for less than 10 years expressed greater interest, with some differences statistically significant (Active Learning and Assessing Student Learning) and others approaching significance (Evaluating Student Learning and Courses, Teaching Adults, and TIPS). Faculty in the early stages of their careers are generally more interested in opportunities that will increase their effectiveness (Baldwin, 1990). Those with greater numbers of years of service are often looking forward to retirement and do not see the usefulness of investing in faculty development. Faculty comments from the needs assessment are instructive here: "Younger members should be interested in most of the above. I'm retiring next year!" and "...I am in my last couple of years of work is a further consideration (to not registering for TIPS)."

Actual registration for faculty development. Our experience with the registration for workshops was that many faculty attending are in the "over 10 years" bracket. This may be due to the fact that more established faculty are looking for new challenges and often take up teaching with renewed vigour. They have made their mark in their field in research and are in need of an outlet for their creative energy and ambition that is a notch less competitive than research (Baldwin, 1990).

The fact that our registration is not dominated by newer faculty may be a result of the lack of time that these individual experience at the beginning of their careers. If promotion decisions

are weighted heavily on research and service, if service for the clinician is rewarded monetarily, and beginning faculty may have more financial liabilities (student loans, young families, large mortgages etc.), then there is great pressure to relegate teaching and workshops about teaching to a low priority. This has been reflected in the perception by newer faculty (less than 10 years employment) that time to devote to faculty development is at a premium and that there is scant attention given to teaching in promotion and tenure decisions (See Appendix C-11).

These findings lead us to a dilemma. No matter how good the workshops or opportunities to learn about teaching we present, there will be some, particularly among the newer faculty, who will be constrained to find the time to participate. These faculty have expressed a strong interest in attending workshops on teaching but they are laden with other pressures. It is clear that simply offering the best and the most sought after workshops will not in itself address the needs of teachers in the College of Medicine. What is needed are complementary changes to the system in which faculty teach. Hence the importance of the environmental concerns, both informal and formal, addressed in the needs assessment and the academic leadership workshops.

Personal learning by faculty. The intellectual stimulation from teaching advanced students seems to be as strong for both groups of faculty. The situation is different for undergraduate teaching. Newer faculty rated the learning experience of working with undergraduate students higher (around "Agree") while senior faculty rated it less highly (around "Disagree"). This makes sense if we consider that newer faculty might still be developing courses and lectures and may not be very familiar with the specific course they have been assigned to teach. Newer faculty might find the work they do to teach a course to be a personal learning experience whereas longer term faculty might not.

Expectations for teaching quality. The mean for newer faculty on the statement about the expectation by College administration for teaching was about neutral (2.46) while the mean for senior faculty was close to "Agree" (2.04). This indicates that newer faculty sensed a lower standard for instruction. Newer faculty also perceived less of a norm among faculty for high quality teaching. The mean for newer faculty was around 2.68 while senior faculty rated it at 2.02, almost exactly "Agree." The difference between the means of the two groups was statistically significant at $p < 0.05$. Newer faculty perceived a norm for quality teaching that is less than that perceived by longer-term faculty.

Newer faculty may have had a higher standard for teaching than their more senior colleagues. They may have noticed that the more senior faculty did not encourage teaching and did not seem to expect teaching to be done as well as they would like. Junior faculty may simply have had different standards for teaching and this was reflected in different perceptions of professional expectations for the quality of teaching. The faculty member who suggested that change would occur when the senior faculty retire, might indeed be cynical, but might also be correct.

One implication for faculty development is to be supportive of the newer faculty, the leaders of the future, to help them maintain a high priority for teaching. When these faculty members are finally in positions of responsibility for teaching, they will be better equipped to do things differently and to act on their higher standards. This speculation could be investigated at the College although no plans have been made to date.

Summary of the Needs Assessment

The needs assessment questionnaire contained a section on forces that enhanced or impeded teaching. We wanted to know what some of the organizational and social influences on teaching were so that we could act on that information. We identified several key impediments and motivators. We also discovered some differences in the way newly appointed or long-term faculty members perceive the organizational situation at the College. There has been no action taken yet related to the discoveries that we made in the needs assessment.

Summary of Chapter V

The fourth and last component of the framework for thinking about faculty development is organizational and social supports for teaching. This chapter described what I did at the College of Medicine, working with Drs. Spooner and Harding, to develop these supports. We worked with faculty leaders by initiating a series of workshops on academic leadership and an action planning process. These were well received but there is as yet no evidence to suggest that they have had

a measurable effect on the organizational climate at the College. We also began instructional study groups (ISG) for faculty wanting to talk about their teaching challenges and situations. These have held much promise but have not been well attended. At this point, they are still being considered as part of the faculty development plans at the College. We conducted a needs assessment of organizational and social forces which support or impede teaching. This provided a rich source of data about administrative considerations, motivators (both intrinsic and extrinsic), and revealed differences in perceptions between those faculty with less than 10 years employment with the College and those with more than 10 years. There has been no action taken as a result of this information being available. There are plans to further reflect on it and other data related to organizational and social supports.

I draw the conclusion, agreeing with Seldin (1990), that it is very difficult to change the culture of a college. These efforts of ours certainly were needed and ought to be pursued. However, there is no potential here for a quick and easy change. Influencing the organizational and social supports for teaching is a long-term project.

CHAPTER VI

ASSESSING THIS ACTION RESEARCH PROJECT

As noted earlier, there are two main purposes of action research. One is to benefit the client or host organization and the other is to add to the body of knowledge about a particular topic or phenomenon (Aguinus, 1993). In this chapter I will review the action research process in light of the first purpose, its effectiveness for the College of Medicine. In the next chapter I will review the whole study relative to the second purpose, as a means for learning more about faculty development. This review of the effectiveness of the action research project itself is a kind of meta-evaluation of the work that I have done (Stone, 1980).

I have decided to judge the efficacy of the action research project in a number of ways. I will explore the effect which information had on decisions at the College of Medicine. I will also look at the success of the programs which were initiated and sustained at the College. I will suggest that continuance of the project or parts of it after the formal research has ended is also an indication of success of the action research. I will also compare this project to what is considered best practice. Each of these criteria adds a measure of confidence in the judgment of worth of this study.

In this chapter I have reflected on the work which was accomplished through the action research study. The details of the activities are documented in previous chapters. This reflection may seem somewhat subjective and indeed it is in some respects. It does represent my thoughts about the study and the significance of what was accomplished. On the other hand, these reflections have been sparked by and certainly confirmed by Drs. Spooner and Harding. Throughout the study I asked them to comment on the study or they volunteered comments themselves. When writing this chapter I asked them both to read through the reflective part and they indicated agreement with its conclusions and interpretations. This reflection on the study is therefore more than personal interpretation but less than 'hard data' available from the literature.

The subjective nature of the first part of this chapter is particularly focused where I attempt to evaluate my personal contribution to the College. The impact of the researcher on the study is a legitimate measure of the effectiveness of the study (Bennis, 1963). I have attempted to do so in an impartial manner but the reader may be concerned with what could seem like self aggrandizement. This is not the intent of that piece. On the other hand, a robust understanding of the role which I personally played in this study diminishes the importance of the information that I helped to bring to the study. An honest look at my contribution to the work that we did adds balance and truthfulness to this account of the importance of the study to the College of Medicine that would not be possible if I were to somehow neglect or disguise my personal contribution.

Influencing Decisions Through Information

One outcome of this action research project was that there was a great deal of information made available to the College of Medicine, especially to Drs. Spooner and Harding. As reported in Chapters IV and V, data came from original research, such as the TIPS evaluation and the needs assessment survey. There was also information from the literature which I discussed or passed on to my two colleagues in ES&D. As well, I was a personal source of information, an active rather than a passive agent. Sometimes the way in which the information is delivered has as much or more bearing on the outcome than the information itself. In the following section I will elaborate on these three sources and their impact on the College.

The Importance of the Original Research

Much original research was initiated by this action research project, including an extended evaluation of TIPS, the needs assessment, and the evaluation of the academic leadership program. This information added to that which was already available to ES&D and the College on which to make decisions about faculty development.

TIPS

The information that we collected about the efficacy of TIPS had several effects. First, it confirmed in the minds of Drs. Spooner and Harding that TIPS was beneficial for teachers and that efforts to promote and provide TIPS workshops ought to continue. The evaluation told us that TIPS was a very good short program and that to support and expand it were worthwhile endeavours for the College of Medicine. Second, the Dean, who was also very interested in the efficacy of TIPS, expressed satisfaction with the research that we did and was able to use the results to better justify the allocation of resources to TIPS.

Needs assessment

The results of the needs assessment survey permitted us to proceed with confidence in the building of a faculty development program because it helped identify the sessions in which faculty were most interested. We were also able to gather data on the perceptions of faculty regarding some of the organizational and social forces that affect teaching. Some of these findings are being addressed by the action planning process which grew out of the academic leadership seminars. The information gathered through the needs assessment was being used and will likely continue to be a rich source of data for the College for some time to come.

Academic leadership

The information that we collected has helped us to make improvements to the workshops, as described in Chapter V. We learned about what faculty wanted out of such a workshop and what they did not want. We were also able to make some direct observations, reflect on them, and make some judgments regarding the need for follow-up sessions on academic leadership.

The Value of Bringing Forward Previous Research

Credit for the success of this project must not go only to the original research mentioned above. There were other sources of information in addition to the original research. Drs. Spooner and Harding both had extensive prior knowledge of medical education: Dr. Spooner from experience in giving support and from years of study and Dr. Harding primarily from extensive experience as a clinical faculty member. There was also a great deal of information from the literature that I brought forward for consideration by Drs. Spooner and Harding. Much of this influenced my actions and the advice that I gave as we deliberated or reflected on the situations we were trying to improve.

Instructional Study Groups

The empirical and theoretical support that I was able to uncover for the ISG has enabled us to persist in including them in our faculty development plans. With such a low response rate to the ISG to date, it would have been easy to abandon them in spite of Dr. Harding's support for establishing "colonies". The literature was clear in providing support for continuing to promote the ISG.

Augmenting Organizational and Social Supports

The extensive support in the literature for the development of academic leadership was instrumental in the acceptance of the seminars for the College. Without this desire for academic leadership, the momentum for such a program might easily have died with the cool reception given by the CDET. This assumes that the program for academic leadership has been of significant benefit to the College . On the other hand, it was argued in Chapter 5 that the idea of developing academic leadership was more important than the specific program which we used. It was the literature and previous research which helped to lead us to the conclusion that there was a need. The specific program that we used is a secondary issue that I raised in Chapter V and do not need to belabour.

The Personal Impact of the Researcher

In this section I examine my own personal impact on this study. The researcher does exert a certain amount of influence in an action research study and the personal impact of the researcher is one of the variables which ought to be considered. Action research is also the study of one's self, one's practice. This reflection will balance the importance of the information that was made available to the College with the importance of my personal contribution to ES&D. I contributed additional resources of close to another half-time position to ES&D which originally had only 1.3 full time faculty positions. I participated in TIPS, facilitated academic leadership seminars, designed and helped to lead half-day workshops, and promoted faculty development with department heads and with the Dean. An assessment of the action research study must include some thoughtful reflection on the impact that the individual researcher has had on the project. Bennis (1963) writes, "It is still unclear whether the change agent makes his contributions from whatever unique virtues or skills he may possess as an individual or to what extent they stem from the data, concepts, and skills of his discipline" (p. 165). It is not a case of whether the information or the individual made the difference, but how each of those contributed to the overall effectiveness of the project (Phillips & Shaw, 1989).

Leadership

From the beginning of this study, at my request, Drs. Spooner and Harding agreed to meet with me on a weekly basis. These team meetings were new to ES&D and Dr. Spooner commented on a number of occasions that they were a welcome addition to his routine and that the meetings should continue even after this study was completed.

I had been working at the College for four weeks when I finally realized that Drs. Spooner and Harding had been waiting for me to take a leadership role in the project. I had been waiting for them to take the lead by suggesting a direction, areas to research, a course of action to pursue. Ironically, they had decided to assist and encourage my project and had temporarily set aside their five year plan. They had been looking to me to take the leadership for the action research which they were prepared to support.

When I had presented myself to the College in the spring of 1995 I had an outline of a plan to conduct action research in the area of faculty development. I represented to ES&D a new resource and expertise in the area. When I came to begin my study in November 1995, Dr. Spooner was waiting for me to bring the plan into action at the College.

When I did begin to take more initiative for the direction of the project, I did so tentatively, checking for approval and exploring alternatives with my two colleagues. We were able to move forward and develop a plan for faculty development which included the needs assessment and academic leadership program. Once our roles had been informally negotiated, we worked well together. I was able to exercise some leadership yet was constantly vigilant for opportunities to allow my colleagues to take on a leadership role for the project.

Dr. Spooner commented to me in early 1996 that this project seemed less like a research project and more like an additional faculty member who had been added to their team. Rather than being relegated to a junior position on the team, I had been, in some respects, accepted as an equal with them. In November 1996, at one of our regular team meetings, Dr. Spooner noted that my initiative and leadership had made a real difference to ES&D and to the activity level in faculty development at the College(see Appendix 1, November 1996) .

TIPS

My involvement in the last three TIPS workshops lightened the workload for Drs. Spooner and Harding. In addition, I have been able to suggest some worthwhile changes which have been incorporated into TIPS. We are now giving more of an emphasis on helping the participants to prepare an instructional plan and have made ourselves available during TIPS to offer advice and guidance. This, we hope, will allow for a more effective transfer of newly learned skills from the workshop to their teaching situations. I planned and delivered a session using an alternative method of instruction to provide participants with a model of a type of lesson aimed at teaching a new concept (Joyce & Weil, 1986).

Half-day workshops

As part of the planning stage of the action research cycle, I participated in the process of choosing the sessions and designing the program. I also made an important contribution to the designing of the half-day workshops themselves, and together with Drs. Spooner and Harding, delivered the workshops.

Summary of Usefulness of Information

The information generated for the College of Medicine through this project has been substantial. Both previous and original research have had considerable impact on the faculty development programs at the College. TIPS workshops were successfully evaluated, an extensive needs assessment completed and used for relevant decision-making, a series of workshops on academic leadership offered, and instructional study groups initiated. As a researcher, I also made a considerable contribution to faculty development at the College as outlined previously.

Success of Interventions as a Standard of Achievement

The success of the faculty development program of the fall term, 1996, as well as the academic leadership workshops have been a positive addition to the faculty development program already operating at the College. Perhaps the definitive test of the success of this project will come in the year 2002 when the College is once again evaluated by an accreditation committee. A comparison of faculty development and teaching across a seven year interval ought to provide clear evidence of the long-term effectiveness of this action research undertaking.

The faculty development program was well received by those who attended (Tables 12 and 13). It conformed well to the framework for thinking about faculty development advanced in Chapter IV. It is still much too early to determine the outcomes of the program in terms of

improved teaching and learning.

The academic leadership program was also well received both by administrators (see Appendix 1 August and November 1996) and participants (see Table 15). Although there was no evidence discovered to suggest the degree to which the intended purposes of the workshops had been realized, there were other benefits stemming from the workshops which made them important additions to the faculty development initiatives at the College.

Project Continuance as a Measure of Success

On another front, the success of this action research study can be measured with the continuance of the cycles of observing, reflecting, planning and acting that characterize action research. Although it cannot be assumed that the continuance of a program is ample evidence on its own that the program was worthwhile, it is one possible indicator of success and recognition. In this section I will make the point that to continue was a vote of confidence in the program.

Continuing With Workshops on Academic Leadership

The Dean, together with ES&D, decided to offer workshops on Academic Leadership at least one more time for those at the College who were not able to take advantage of the opportunity on earlier occasions. There is also the potential for other workshops involving faculty leaders which may grow out of the initial sessions on academic leadership.

The action planning process, which is part of the initiatives to alter the organizational and social supports for teaching, is scheduled to continue. The action plans and other data generated will be used, together with information such as the needs assessment and ES&D's five-year plan, to make recommendations for action to the Dean, the CDET, and ES&D itself. There are plans in place to keep the momentum gained from these various initiatives.

Faculty Development Continues at the College

The winter/spring 1997 faculty development program has been implemented as reported in Chapter IV. The TIPS workshops also continue with some of the improvements made in the course of this project. The expectation by ES&D is that these programs will proceed for the foreseeable future and that information to make them more attuned to the needs of faculty will be routinely collected.

Strengthening ES&D

ES&D will benefit from another full-time faculty position being added. The Dean has made plans to hire another faculty member to work in the area of faculty development, an indication of the success of this action research project and the continuing need for faculty development at the College. The Dean and department heads, as well as Dr. Spooner, expressed confidence that the College was on the right track in aggressively pursuing faculty development for enhanced teaching. This confidence was at least in part due to the success of this project.

Standards

There is yet another way of judging the value of the action research process as it was realized at the College of Medicine. This entails evaluating the process based on standards of performance. Did the project procedures and processes measure up to standards and expectations of what has been identified as best practice in the field? It is to this question that I devote some attention in the last section of this chapter.

The Joint Committee on Standards for Educational Evaluation (1994) defines a standard as "a principle mutually agreed to by people engaged in a professional practice, that, if met, will enhance the quality and fairness of that professional practice..." (p. 2). In this section I will compare applicable parts of this action research project to the standards of evaluation and the

standards for organizational developers. I will reflect on the action research process itself and try to judge its value by comparing the action research which I conducted to predetermined standards of practice.

Standards of conduct and service for some professional activities related to action research, such as evaluation (Joint Committee on Standards for Educational Evaluation, 1994) and organizational and human systems development (Gellermann, Frankel & Ladenson, 1990) have been formed. There is neither such standards nor even a systematized discussion of standards for action researchers. It is the purpose of this chapter to build a framework for assessing action research from an ethical perspective and then to apply that framework to the action research study which I conducted.

Standards For Action Research

Action researchers have reported encountering many ethical dilemmas in the course or their work. Israel, Schurman, & Hugentobler (1992) outline several areas of potential conflict associated with the way action researchers manage their multiple and shifting roles which include values and interests in the project, control of the shared project, issues of political power, and the rewards and costs experienced by project participants. Rappoport (1970) identifies dilemmas of client acceptability, use of data, and the balance between the intervention role and the research role. Each of these reports, sharing much in common, gives voice to some of the concerns experienced by action researchers. Only by operating with some guiding principles could action researchers ever experience these situations as conflicts or dilemmas. Unfortunately, these principles and guidelines have not been clearly identified and articulated. The framework for making ethical decision in action research, which I will develop in this chapter, will help make ethical dilemmas more explicit, understandable, and hopefully, avoidable.

Warrants for Ethical Considerations in Action Research

Ethics have been defined variously by different authors. I accept the definition proposed

by House (1993) that ethics "are the rules of right conduct or practice, especially the ethical standards of a profession" (p. 163). It is useful to think of the ethics of action research as a subset of ethics in general, and more specifically, as a subset of ethics in the professions. I will pursue a discussion of ethics in the professions.

Based on liberal democratic principles. Generally, the ethical considerations in the professions are based on values of liberal democracy (House, 1993). I proceed on the assumption that our society aspires to be, and is, a liberal democracy (Strike, 1991). This relationship between the principles of liberal democracy and professional ethics is internally valid; it makes sense for ethical considerations to be based on more fundamental warrants, and reliance on the widely held values of liberal democracy provides adequate guidance. There are other ways of thinking about and ordering society such as communitarianism, Marxism, and theocracy. It is not my intention to debate the merits of different ways of thinking about society. Discussions of ethics in action research have, as their basis, the moral framework of liberal democratic principles because we have, as a society generally, chosen to shape our institutions and our formal relationships accordingly.

Liberalism explained. The central tenet of liberalism is the preeminent place assigned to the values of human freedom and equality (Brown, 1986; Grant, 1985; Howe, 1993; Kymlicka, 1990; Strike, 1991). Above all other rights and responsibilities, these values are held to be the most important. Liberalism holds that it is not the role of the state to select or promote one vision of a "good life" above others. This is considered to be the sole realm of individuals to decide for themselves. In a liberal society, the preeminent conception of the good is the individual's freedom to choose. As Bull (1991) summarizes,

> Locke argued that agreement on a single vision of the good life or the political ascendancy of one such vision over its competitors is not required for the establishment and maintenance of a civil government.... In the most general terms, liberalism prescribes one basic purpose of government - to facilitate the realization of each citizen's vision of the good life, whatever that vision turns out to be. (p. 89)

Liberalism, then, is a doctrine of respect for individuals along with non-interference by the state.

Democracy explained. Democracy is not the same as liberalism. Democracy may be defined as a decision-making procedure based on the equal sovereignty of people (Howe, 1993; Strike, 1991). In a democracy, the major issues are subject to public deliberation and decisions.

In a democracy, the value of a public decision-making process is reinforced by the liberal values of human freedom and equality. Conversely, liberalism and democracy can also be opposed to each other. Whereas democracy is a public decision-making process, liberalism is adverse to the state making decisions which will affect an individual's freedom. Every state decision made through democratic means limits the freedom of individuals and requires the curtailment of liberal values. The vision of the good life, held by the majority, becomes sanctioned by society through the workings of the state and imposed even on those who do not share that vision.

This tension between liberalism and democracy is manifested in various forms of popularly advocated democracies. These form a kind of continuum of liberal democracies at which one end emphasizes liberal values and the other end emphasizes the democratic (Strike, 1991). With a weaker liberal commitment, the democratic aspects become stronger, and, correspondingly, with a stronger liberal influence, the democratic aspects become weaker.

In a strong democracy, participation in democratic decisions is the basis of civic community (Strike, 1991). Strong democracy counters the intense individualism of liberalism by making democratic participation the cohesive force of community. It considers a range of freedoms consistent with democratic participation. In a strong democracy professionals would be expected to contribute to the education of people who would then be empowered to engage in informed dialogue, deliberation, and moral reasoning and thus participate fully in the democratic community. Actions which took citizens away from that ideal would be discouraged. In this respect, a strong democracy is not fully in step with liberal neutrality:

> They do not guarantee a right to pursue one's own conception of one's own good in free association with others. Individual preferences can be overridden by collective choice or by the imperative to promote democratic character. (Strike, 1991, p. 456)

Despite the fact that professional ethics, those of action research included, can be soundly based on principles of liberal democracy, the debate over ethical foundations can not be concluded. Within liberal democracy there is a range of ethical options available. If professional standards and ethics are portrayed as fixed and immutable, these send a false message. The Program Evaluation Standards (Joint Committee on Standards for Educational Evaluation, 1994), for example, claim that the standards are intended "to guide the design, employment, and critique on evaluations of educational

programs.... to stimulate and facilitate thoughtful dialogue" (p. 4). This modest assertion is more appropriate than claims to absolute ethical standards.

A Model of Ethical Conduct

A model for ethical conduct must be based on principles of ethical conduct. This applies as well to those who conduct action research. The fiduciary model comes well recommended (Tong, 1986).

Based on principles. Ethical principles designed to guide the work of professionals have been advanced by various authors and derive their authority through their consistency with liberal democracy (House, 1993; Applebaum & Lawton, 1990; Tong, 1986). Many of these ethical principles are discussed without reference to the tenets of liberal democracy. Many who hold and advocate these principles may neither be aware of their source in liberal democracy nor the basis of their appeal. Nevertheless, these ethical principles are indeed founded on liberal democratic values.

These ethical principles are (a) autonomy, (b) standard of care, and (c) respect for democratic values and institutions. Autonomy refers to the intrinsic worth of individuals and involves guarding the freedom of persons to make meaningful choices about their life. Standard of care is often expressed as beneficence and non-maleficence. This principle upholds the responsibility of the professional to provide quality service to his or her clients (beneficence) or at least to refrain from causing harm (non-maleficence). Respect for democratic principles involves promoting those values which support our society and stimulate citizen participation.

Fiduciary model. The fiduciary model best encompasses these three principles of ethical conduct and avoids the common fallacies outlined below. In this model, experts assume special obligations but treat their clients as competent authorities able to make responsible decisions (Tong, 1986). According to this model, the professionals serve both the office and the stakeholders, not just the incumbent decision makers. It is a special relationship of trust: decision makers must be able to trust the professionals who work with them and the experts must be able to trust the decision makers to use the fruits of their intellect properly (Tong, 1986). House (1993) parallels this notion when he wrote that professional ethics encompass issues of social justice.

Professionals, he said, ought to have regard for the entire social structure, and not just for one's own role within that structure. The fiduciary model urges professionals to be guided by principles which go beyond the specific parameters of the contract or the working relationships that they have with their clients. They have an obligation to find more fundamental warrants than shortsighted obligations to the client, the contract, the "best decision," or the friendship. Professionals must draw their warrants for ethical action from the values and principles of liberal democracy (House, 1993).

Ethical Fallacies

I will dispel certain ethical fallacies before exploring the implications of ethical principles for action researchers. The fallacies (a) clientism, (b) contractualism, (c) paternalism, and (d) friendship are described below.

Clientism. Clientism is the claim that doing whatever the client wants or is in the best interest of the client is ethically acceptable (House, 1993; Tong, 1986). This model does not encourage the professional to be guided by values and ethical concerns beyond the client's own principles or lack thereof. This raises the issue of working for a client who is acting immorally and both House (1993) and Tong (1986) clearly consider this to be grounds for objection. Rapoport (1970) raises the similar ethical dilemma, for action researchers, of an organization whose goals are unethical. This situation might be acceptable to action researchers (mis)guided by the ethical fallacy of clientism.

Contractualism. The second fallacy is that of contractualism, where all the duties and responsibilities of the client and the professional are made explicit and agreed to in advance. Both Tong (1986) and House (1993) recognize that one cannot foresee all the circumstances of a relationship beforehand and that it is impossible to develop a complete contract. As House wrote, "The lack of contractual authority does not alleviate moral responsibility" (p.169). In the process of conducting action research, an area for inquiry or development may arise after making the original agreement. It is, in fact, the nature of action research to discover new areas for study while in the process of exploring. The contract model is therefore incomplete. It cannot guide the ethical considerations of professionals and of action researchers in particular.

Paternalism. Another fallacy is that of paternalism (Tong, 1986). In this model, the professional, rather than the client, accepts the major responsibility for decision making. This is problematic because the client bears the responsibility for the decisions and should make them. Paternalism is a dilemma for the action researcher. Initially, some of the decisions regarding the conduct of the inquiry may be delegated to the action researcher. Eventually the action researcher is to turn over more and more of this duty to the client. The action researcher needs to ensure that the relationship with the client is not persistently paternalistic.

Friendship. A fourth fallacy is the friendship model (Tong, 1986). In this model there is a close working relationship between the professional and the client; they are partners in the enterprise. This becomes a problem when the professional gives more weight to friends in powerful positions than to the stakeholders and beneficiaries of programs and policies. Managers of programs become the sole or main recipients of the advantages of diligent inquiry (House, 1993). This relationship may profit the partners but not those who are supposed to be served.

Ethical Dilemmas for Action Researchers

There are many ethical dilemmas which might plague the action researchers as a result of their commitment to enter into a working relationship based on the fiduciary model. Many of these ethical dilemmas will be similar to those encountered by other social scientists, such as evaluators and organizational and human systems development professionals, who are trying to effect change as they are studying it (Bennis, 1963). Bennis identifies three substantial predicaments. First, as the researchers becomes more involved in the life of the organization, it becomes more difficult for them to remain detached and maintain their critical faculties. Second, it may be difficult to decide how to use information or where to place the priority, either for furthering the goals of the organization or for private study. Third, there is a struggle between boldness and caution in that the researcher, possessed of scientific skepticism, may want to be more cautious, and the change agent, on the other hand, more tolerant of risk-taking, may want to move ahead boldly.

These three major ethical dilemmas are highlighted in the following sections. The questions of detachment and the use of information are examined under considerations of standards for evaluation. Questions of detachment and boldness or caution are raised in the

discussion of the consultative stages of the action research project.

Using the Program Evaluation Standards to Critique This Study

Standards taken from the Program Evaluation Standards (Joint Committee on Standards for Educational Evaluation, 1994) apply only to the evaluation projects which were conducted as part of the action research study but do not apply to the planning and acting stages of the action research cycle. The relevant activities include the initial inquiry into medical education and the College of Medicine, the TIPS retrospective study and evaluation, the needs assessment, and the evaluations of the faculty development program and the academic leadership workshops. I have chosen to use only a selection of these standards for several reasons. These standards are, in my opinion, most salient to the work that I managed. They also pertain more closely to the ethical dilemmas faced by action researchers identified empirically and reported above. It is accepted practice to use the standards to critique this study as I have done (Gowdy, 1997). Other standards which apply to the planning and acting work undertaken as part of the overall action research study will be explored later in this chapter using a different set of standards.

The Program Evaluation Standards

Within each of the broad groupings described below are more specific statements of evaluation standards. These very general descriptions provide some of the background needed to judge the critique itself. Referring to the section on a model of ethical conduct developed earlier in this chapter, I point out the ethical principle or principles on which each grouping is based.

Utility. These standards apply to evaluations to make them informative, timely, and influential. They impose on evaluators the burden of care to know their audiences and their information needs, respond with appropriate evaluations, and report the results in a clear and timely fashion. They are based on the ethical principle of care since the professional must provide quality service that contributes to the utility of the evaluation.

Feasibility. These standards recognize that evaluations interfere with the natural operation of the programs and so consume valuable resources. Feasibility standards call for evaluations to be realistic, prudent, diplomatic, and economical. These also are based on the ethical principle of care.

Propriety. These standards reflect the reality that evaluations affect people in many ways and that the rights of persons need to be protected. These standards are based on the ethical principles of care and autonomy because in the rendering of quality service the evaluator must ensure that individuals are respected.

Accuracy. These standards gauge the soundness of the information and the judgments. The evaluation should be comprehensive, the information technically adequate, and the resulting judgments linked logically to the data. These standards are based on the principles of care and respect for democratic values and institutions; without access to accurate information there can be no authentic citizen participation.

Applying the Standards to the Problem Definition Phase

The program evaluation standards can be applied to the various phases of an evaluation. In this section I compare the way in which the evaluation problems were defined with the standards for problem definition.

Stockholder identification (Utility). "Persons involved in or affected by the evaluation should be identified, so that their needs can be addressed" (Joint Committee on Standards for Educational Evaluation, 1994, p. 25). Drs. Spooner, Harding and I took some time to identify the stakeholders. As reported we determined, for the purpose of this study, that we would concentrate on faculty, but not lose sight of the fact that it would be the student who would benefit from improved teaching. Through the needs assessment survey, we sought student perceptions of faculty needs. In the future, ES&D intends to research the effect which good teaching has on the study life of the medical student.

Ultimately, it is the public which benefits from the educational program of the College as recognized in the Kerr White Report (White,1989). Although we did discuss this briefly, we did not include the general public in this study, nor do we have any plans to do so. The College of

Medicine established the Committee on Educational Policy to oversee its educational programs and its mandate requires participation from the broader community.

Context analysis (Accuracy). "The context in which the program exists should be examined in enough detail, so that its likely influences on the program can be identified" (Joint Committee on Standards for Educational Evaluation, 1994, p.133). In Chapters I and III, I described the current challenges facing medical education in general and the College of Medicine in particular. The analysis of the teaching situation through a review of the literature and the needs assessment survey was a strong point of this study.

Applying the Standards to the Evaluation Design Phase

In this section I compare the way in which the evaluation was designed with the standards for this phase of an evaluation. The appropriate standards were identified in the manual in which the standards were described and elaborated (Joint Committee on Standards for Educational Evaluation, 1994).

Described purposes and procedures (Accuracy). "The purposes and procedures of the evaluation should be monitored and described in enough detail, so that they can be identified and assessed" (Joint Committee on Standards for Educational Evaluation, 1994, p. 137). This standard was not fully met for two main reasons. First, I discovered only after becoming involved in this action research study, that the project largely involved program evaluation. Before I had a chance to prepare myself for the work, it had already begun. Therefore, I was not fully aware of the purposes, and, in particular, the procedures that were available to me in completing an evaluation study.

Second, action research is a collaborative and emerging inquiry (Reason, 1994) so the exact work which I was to undertake was not fully known at the outset of the study. Drs. Spooner, Harding, and I responded to different challenges as our study progressed. The nature of action research is such that the possibilities for inquiry and the answers which emerge to the practical problems that are tackled are never precisely known before the project is begun. Though there may, at first, be some general direction and ideas about opportunities for gathering data and generating knowledge, these initial impressions change throughout the process of conducting

action research.

This action research project was collaborative and emergent. It was collaborative in that Drs. Spooner and Harding and I cooperated on the specific steps that we took within the action research stages of observing, reflecting, planning, and acting. This resulted in the study taking on a unique appearance. It was also emergent. As action was taken and information gathered, the situation at the College of Medicine changed. In order to remain relevant, our research priorities emanated from the current situations that we faced.

Formal agreements (Propriety). "Obligations of the formal parties to an evaluation (what is to be done, how, by whom, when) should be agreed to in writing, so that these parties are obliged to adhere to all conditions of the agreement or formally to renegotiate it" (Joint Committee on Standards for Educational Evaluation, 1994, p.87). Due to the emergent nature of the action research protocol, the precise obligations were not known prior to the agreement between myself and the College. There is a written agreement, but it is not detailed. As we progressed through the study and began different stages of the action research cycle such as the TIPS evaluation and the needs assessment, Drs. Spooner, Harding, and I negotiated the responsibilities at our meetings. These were never formalized and put into writing. They were, however, performed as agreed.

Applying the Standards to the Information Collection Stage

In this section I compare the way in which the data were gathered with the standards for this phase of an evaluation. The use of the standards represents a retrospective in that these were not know to us prior to the activity. This examination of our practices, this praxis, serves both to inform our own practice and to evaluate what we did at the College.

Evaluator credibility (Utility). "The persons conducting the evaluation should be both trustworthy and competent to perform the evaluation, so that the evaluation findings achieve maximum credibility and acceptance" (Joint Committee on Standards for Educational Evaluation, 1994, p. 31). In this regard I was not alone. Drs. Spooner's and Harding's credibility were high and I was, in many respects, the junior and unknown partner. I recognize that I did not know as much about what I was supposed to be doing then as I do now. I was only a Ph.D. candidate in a strange

environment and I had much to learn. Although I did bring a certain amount of expertise and some professional qualities, I consider that my competence level has increased significantly since the beginning of the project.

I learned an important lesson related to evaluator credibility. When we were seeking more support for the study from faculty at the College of Medicine, we approached the CDET. They were quite reluctant to become involved because they did not understand action research and because they did not want to take on the responsibility of supervising a graduate student. I confused them with unfamiliar terms and so lost their sponsorship. If I had introduced my study as an evaluation project with some additional consultation in support of faculty development, I am quite sure that I would have been able to gain their support. An action research project by a graduate student did not have much credibility, but an evaluation study probably would have.

Bennis (1963) raises the concern of objective detachment by the action researcher. In this study I had the benefit of colleagues to inspire and challenge my reflections. They were from the College of Medicine and not themselves outside personnel. I was also under considerable pressure to perform well since I learned early in the study that the Dean was then considering the possibility of hiring me as an additional faculty member with ES&D. Although I can find no evidence to suggest that there was collusion with the system at the College of Medicine, either intentional or otherwise, it remains for external assessors to determine the degree of collusion and detect any serious loss of objectivity on my part.

Practical procedures (Feasibility). "The evaluation procedures should be practical, to keep disruptions to a minimum while needed information is obtained" (Joint Committee on Standards for Educational Evaluation, 1994, p. 65). The retrospective self-evaluation of TIPS worked very well to help substantiate the effect which the workshop was having on faculty while at the same time being relatively simple and discrete. As well, the needs assessment questionnaire took less than a half hour to complete, distributed the burden of providing information among many faculty, and provided valuable information. This standard was met well.

Complete and fair assessment (Propriety). "The evaluation should be complete and fair in its examination and recording of strengths and weaknesses of the program being evaluated, so that strengths can be built upon and problem areas addressed " (Joint Committee on Standards for Educational Evaluation, 1994, p. 105). The evaluation of the TIPS workshops was a

compromise. We did not expend resources to check beyond the self-assessment of participants or to compare TIPS to comparable workshops. These elements might have added to the quality of the evaluation but would have taken valuable resources away from other more pressing challenges. In other words, the evaluation of TIPS was pursued just enough to satisfy the Dean, Drs. Spooner and Harding, and me that TIPS was having a positive effect on teachers.

This same kind of compromise was present in the needs assessment and evaluation of academic leadership seminars. We collected enough information so that we could proceed with confidence to the next stages of the action research cycle. This did not seriously compromise the contribution which this information made to the discipline (discussed at length in Chapter 7). Any dilemmas regarding the use of the information for purposes of science or of action (Bennis, 1963) were generally resolved in favour of the action purpose with provision made to conduct further research at a later date if needed.

Defensible information sources (Accuracy). "The sources of information used in a program evaluation should be described in enough detail, so that the adequacy of the information can be addressed" (Joint Committee on Standards for Educational Evaluation, 1994, p. 141). Information sources for TIPS were varied: participant self-assessments, participant surveys of satisfaction, and personal first-hand observations. The needs assessment surveyed all full-time faculty, the more active part-time faculty, and students, most of them from the third and fourth years. The evaluation of academic leadership used indications of participant satisfaction, interviews of participants, and the perspectives of the Dean and Drs. Spooner and Harding. These sources of information were appropriate and produced rich data.

Valid information (Accuracy). "The information gathering procedures should be chosen or developed and then implemented so that they will assure that the interpretation arrived at is valid for the intended use" (Joint Committee on Standards for Educational Evaluation, 1994, p.145). Validity addresses the trustworthiness and soundness of the inferences made from the data gathered for what the decision-makers need.

The first question which arises is about how the needs of the decision-makers are to be determined. Is this a role for the decision-makers alone, or is it a responsibility of the evaluator to anticipate needs or make suggestions for valuable information? Is it paternalistic for the action researcher to infer and insist on meeting certain needs, or is it just being helpful? My resolution of

this potential conflict was to consider myself fully one of the decision-makers and therefore involved in the formulation of the evaluation. It was not paternalistic of me to participate in the making of decisions for which I was responsible. I acted in what I considered to be the best interests of the College and saw myself as one of the decision-making team.

On the other hand, ES&D was in an advisory relationship with the Dean. We were constrained through budget and mandate. This made the Dean a major decision-maker for faculty development with ES&D an advising agency. I was not being paternalistic in providing assistance to ES&D since together we were clearly in an advisory role to the Dean. We did not make decisions for him; we provided advice and suggestions and he was free to approve, reject, or amend them.

Various sources of information were also used to validate the data. The needs assessment was based on multiple perspectives and sources of information, as was TIPS. In cases where there was some doubt as to the validity of the information, as in the retrospective self-assessments, this was acknowledged, and further research was recommended.

Applying the Standards to the Information Analysis Phase

In this section I will compare the ways in which the information was analyzed with the program evaluation standards for such activity.

Values identification (Utility). "The perspectives, procedures, and rationale used to interpret the findings should be carefully described, so that the bases for value judgments are clear" (Joint Committee on Standards for Educational Evaluation, 1994, p. 43). Ideas of what has merit and what does not were not made explicit in the analysis of the information. There may be different values held by Drs. Spooner and Harding regarding what is worthwhile faculty development as compared to the Dean, for example. Even Dr.Spooner's primary concern that all teachers at the College be well trained and Dr. Harding's desire to see "colonies" of effective teachers spring up around the College demonstrate that there were different value positions. Furthermore, the Dean is also concerned with other issues such as enhancing the stature and ensuring the survival of the College. Similarly, my values were not always made explicit such as is the dilemma between using information to change the College and adding to the store of

knowledge of the discipline. This standard was not well followed.

Justified conclusions (Accuracy). "The conclusions reached in an evaluation should be explicitly justified, so that the stakeholders can assess them" (Joint Committee on Standards for Educational Evaluation, 1994, p. 177). Where I have made conclusions about certain programs, I have indicated the data and analysis which I have used as a basis for the judgments. Furthermore, where there is some doubt or ambiguity, I have indicated this and made reference to the need for further research, as in the evaluation of TIPS and the misinterpretation of the item on assessment techniques that we used on the needs assessment.

Applying the Standards to the Evaluation Reporting Phase

In this section I critique the way in which the evaluation results were reported with the standards for this phase of the evaluation. This critique is summative in that the events have passed, but it is also a formative critique in that some action can be taken in the future to remedy any deficiencies.

Report timeliness and dissemination (Utility). "Significant interim findings and evaluation reports should be disseminated to intended users, so that they can be used in a timely fashion" (Joint Committee on Standards for Educational Evaluation, 1994, p.53). Our team was the main users of the information because we needed it to make plans for faculty development. This standard is one which was well served by the action research protocol. Findings about TIPS and results from the needs assessment were given at the academic leadership seminars and informally at the action planning sessions. The Dean received early versions of the information and was briefed in periodic meetings that we had with him.

Information about the TIPS course, in particular, must yet be distributed to faculty. ES&D is considering using participant testimonials about TIPS to try to promote the workshop among faculty. The research we have done to show that TIPS has made a difference could also be used in promoting it. Furthermore, specific findings from the needs assessment, particularly those about the organizational environment, could be distributed to faculty.

Impartial reporting Accuracy). "Reporting procedures should guard against distortions caused by personal feelings and biases of any party to the evaluation, so that evaluation reports

fairly reflect the evaluation findings" (Joint Committee on Standards for Educational Evaluation, 1994, p. 181). This standard has been assured by the review process through which the reports and this dissertation pass. The interpretations of the data and the reporting were collaboratively decided by Drs. Spooner and Harding and me. The data and analysis have been reviewed by the Ph.D. dissertation committee as well.

Perhaps one more assurance of impartiality can be given. Although I had a personal stake in the evaluation of the academic leadership workshops, I did not rate them highly. If I can be so candid for the academic leadership seminars, then stakeholders can be reassured as to the impartiality of the reporting of this and other program evaluations.

Application of the Program Evaluation Standards : Conclusion

I have tried to point out that this study, in the observing and reflecting stages of the action research study, has adhered fairly well to the more applicable standards for evaluations. There are other standards on which comments could be made, but which, in my opinion, do not get at the heart of this action research study. I now turn to an examination of the standards that apply to the planning and acting stages of the study.

Using the Organizational and Human Systems Development Standards to Critique This Study

Organization and Human Systems Development (OD-HSD) is a community of professionals whose work is based on the application of behavioural and social sciences with a human systems perspective (Gellermann, Frankel, & Ladenson, 1990). The standards are a resource to help professionals make responsible and informed ethical choices while involved in work with human beings and human systems. The standards apply to the consultative work of action researchers in the planning and acting stages of an action research cycle and serve well as criteria of good practice for this action research project at the College of Medicine.

The OD-HSD Standards

In this section I describe broad categories of standards expressed as responsibilities (a) to self, (b) for professional development and competence, (c) to client and significant others, (d) to the profession, and (e) to society.

Responsibilities to self. Since OD-HSD professionals have committed their talents to the service of others, it is easy for them to ignore their own personal and family priorities. These standards are based on the ethical principle of autonomy since they are encouraged to respect themselves as inherently valuable persons.

Responsibilities for professional development and competence. This encompasses duties to ensure that OD-HSD professionals have the competencies they claim to have and that they accept challenges at the edge of their competency with integrity. This standard is based on the principle of care that adequate service is provided to the clients.

Responsibilities to client and significant others. This obligation includes identification of the client or clients and stakeholders, the communication of responsibilities and values conflicts. Great sensitivity must also be exercised in respecting the rights of individual whose lives will be changed by building in participation, conditions for withholding information, confidentiality, contractual arrangements, third party responsibilities, conflicts of interest, as well as role conflict in action research projects. This standard also is based on the principle of care and autonomy.

Responsibility to the profession. This standard comprises the relationships among OD-HSD professionals who are working together and responsibilities that individuals have to the profession as a whole. This one is based on principles of autonomy and care since it relates to the provision of a high standard of service and an interdependence with other professionals.

Social responsibility. This takes into consideration the morality of the client's purposes and issues of social and economic justice. This standard is based on the principle of respect for democratic values and institutions.

Applying the Standards to the Planning Stage of the Action Research Cycle

The purpose of this stage was to establish the specific goals and strategies that were to

be used in changing the organization. The role of both the change agent and the client system is to agree mutually on the goals and strategies to be used. The common dilemmas that are generally encountered relate to the inappropriate choice of intervention goals and targets, means of achieving those goals, and scope of the intervention (White & Whooten, 1983).

Agree on services and remuneration. "Ensure mutual understanding and agreement about the services to be performed" (Gellermann, Frankel, & Ladenson, 1990, p. 382). It was not entirely clear which services were covered by the agreement that I had with the College of Medicine regarding the doctoral fellowship. I participated as a TIPS faculty beginning in February 1996. It was not until several months later that Drs. Spooner and Harding and I broached the subject of payment for these services (see Appendix A). Acting as a resource person for faculty development activities did not seem to be included in the agreement which I made with the College of Medicine. In an interview with the Dean, he confirmed this interpretation and paved the way for me to receive payment for my services in faculty development, not only for TIPS, but for the half-day and academic leadership workshops as well.

This presented another dilemma. The programs which I then recommended for the College became a potential source of remuneration for me. Fee for service was a very important concern of mine as I was a graduate student without full-time paid work. McDowell (1991) wrote that the dual role of provider and advisor often encountered by professionals creates a conflict between self-interest for remuneration and a service orientation for the good of the client. I handled this dilemma, in part, by making the conflict explicit in meetings with Drs. Spooner and Harding. Drs. Spooner and Harding and the Dean of Medicine were confident that I did not advise any programs that were unnecessary or overly expensive.

Explore implications. "Explore the possible implications of any OD-HSD intervention for all stakeholders likely to be significantly affected" (Gellermann, Frankel, & Ladenson, 1990, p. 381). There was, and still is, the risk that by elevating the role of teaching, the prominence of research will be affected. Many times Dr. Spooner, for example, said that teaching ought to be at least as important as research. This implies a shift in the relative importance of each so that research would lose some of its present place of prominence. One full-time faculty member commented on the needs assessment, "Please don't make the mistake of elevating teaching by running down research." There is concern that changes to the organization which make teaching

more important than it presently is will affect the research role of the College and those who are involved in it.

We did not address this standard and our work has fallen short in this respect. We did not meet with the Associate Dean for Research or any other faculty responsible for research to discuss our agenda and the implications of the interventions we were planning. Although in our discussions we paused briefly to consider the ramifications of our plans and actions on the research community in the College, we did not go further and try to include them, even in some small way, in our deliberations. This shifting balance, which may affect individuals whose main responsibility is research, needs to be addressed (Walter, 1984).

Maintain balance. "Maintain balance in the timing, pace, and magnitude of planned change so as to support a mutually beneficial relationship between the system and its environment" (Gellermann, Frankel, & Ladenson, 1990, p. 381). The faculty development program which we planned and implemented was appropriate to the College. The needs assessment guided its development and the form it took was consistent with good practice of faculty development (Gall & Vojtek, 1994; Hitchcock, Stritter & Bland,1993). The pace was such that it would assist in building momentum for further changes and that it would not overwhelm faculty.

Applying the Standards to the Acting Stage

The purpose of this stage was to implement the interventions or programs that had been developed and targeted for the organization. The client system met its obligations of investing energy and resources required by the intervention. The Dean supported the faculty development, academic leadership, and needs assessment financially. Drs. Spooner and Harding contributed extensively to the programs.

The role of the change agent is to intervene at specific targets and at specific depths. Common dilemmas include assimilation into the culture by the change agent, inappropriate depth of intervention, freedom and consent to participate, and environmental manipulation (White & Whooten, 1983).

Assimilation. The faculty development program, including TIPS, was aided by my

personal contribution. I was a co-presenter and TIPS faculty with Drs. Spooner and Harding. Dr. Spooner noted part-way into this study that he considered me to be a faculty member like himself. From the outset of the study, the Dean was interested in retaining my services after the study was completed and I had graduated. This opportunity for employment became known to me late in 1995 and placed some pressure on me to present myself as an asset to the College of Medicine. I wanted to keep my options open, and one very attractive option was to become a faculty member at the College. This situation made the dilemma of assimilation a looming possibility. As Bennis (1963) warned, I was in danger of losing my objectivity in favour of pleasing the College.

I do not believe that this study was adversely affected by this pressure. I feel that I was able to maintain a certain amount of objectivity and critical eye as witnessed by my evaluation of academic leadership. I was involved in other small scale consulting ventures and employment opportunities. I was not desperate to work for the College; my future was not wholly tied up in the possibility of future employment there. I cannot recall making any decisions or accepting any duties based on the effect of such actions on my future employability with the College. Throughout the study, I tried to be, and I think was successful in staying, committed to the action research project which I had begun; Drs. Spooner and Harding concur with this.

Magnitude. "Maintain balance in the timing, pace, and magnitude of planned change so as to support a mutually beneficial relationship between the system and its environment" (Gellermann, Frankel, & Ladenson, 1990, p. 381). This standard is similar to that of maintaining balance found above in the section about the planning stage. The academic leadership seminars present a dilemma regarding the appropriate depth of the intervention. There was, up to this point, little effect on the culture of the College as a result of the workshops. The problem was that I did not realize the limitations of such a series of workshops and so did not make the College aware that this one set of workshops would not likely achieve ambitious goals for the College. Although the Dean and Drs. Spooner and Harding were informed that these seminars could only be the beginning of a broader intervention to support faculty leaders, they were not fully informed of the limitations of the initial workshops.

Bennis (1963) suggests that action researchers face a dilemma of acting either with boldness or caution. Boldness might be called for by the needs of the organization or of the action research intervention. Caution might be advised by the need to gather research data for

scientific purposes. This was generally not a dilemma for me in this project. The workshops, academic leadership, and action planning were all begun at a manageable pace so that there was time to make observations and collect necessary data. Both the needs of the College for action and my needs for action were met.

Application of OD-HSD Standards: Conclusion

This study, in its planning and acting stages, adhered well to the standards of ethical practice for OD-HSD professionals. The dilemma of receiving remuneration for services was resolved through clarification of the agreements and open disclosure of interests, in accordance with the standards. The estimation of the effect of the academic leadership workshops should have been less optimistically and more realistically stated as recommended in the standards; this was a simple but regrettable miscalculation and not an unethical exaggeration of claims. Finally, considerations of the implications for research of raising the importance of teaching at the College of Medicine means that ES&D ought to seriously consider meeting with those who represent the research arm of the College to discuss the plans and the impact of faculty development programs. In general, this action research project conformed closely to the OD-HSD professional standards.

Summary of Chapter VI

This action research study has made several important contributions to the College of Medicine, University of Saskatchewan. The faculty development programs which were established have benefited the College. The half-day workshops have been relatively successful in providing faculty with specific teaching skills. TIPS has been shown to be effective. Academic Leadership workshops will continue to make a modest contribution to the organizational environment in support of teaching. The needs assessment survey will continue to be a rich source of data. Certainly the College of Medicine has seen substantial benefit from this study.

One purpose of this chapter was to judge this study using ethical standards of practice. I proposed using the standards developed by evaluators and OD-HSD professionals to assess

action research. The evaluation standards applied well to the observing and reflecting stages of the action research cycle. The organizational development standards applied well to the planning and acting stages. I determined that this study followed the standards closely and outlined a number of areas where mistakes were made or where further action is recommended.

CHAPTER VII

STRENGTHENING FACULTY DEVELOPMENT AND ACTION RESEARCH

I began this dissertation by stating that the central purpose of the study was to learn about faculty development through an action research protocol in a medical school setting. In this chapter I review the ways this central purpose has been accomplished and explicate the practical, theoretical, and research implications of this study. This chapter is a critique of the research which highlights its strengths and the ways that similar research might be improved. The discussion is organized into two main sections. The first section examines the contributions to the field of faculty development that were made by the research. The second section establishes the importance of this study for action research as a methodology.

Faculty Development Revisited

In this section the contributions which this study has made to the stock of knowledge about faculty development is identified. First, the definition of faculty development that was proffered at the beginning of Chapter I and its usefulness for this study are reconsidered, both theoretically and practically. This analytical task is particularly crucial when considering the influence that instructional development can have on the ultimate success of faculty development. The idea of teaching, conceived of as a social practice, and the way that I have conceptually advanced an understanding of faculty development are also presented. The seeming tension between recognizing the role of social norms in an individual's performance and the importance of competence are probed and clarified. I give some attention to the importance of organizational support for faculty development: Instructional Study Groups (ISG), the Academic Leadership Workshops, and the needs assessment. In spite of, and perhaps because of, some of the problems with the research which are raised in this chapter, this study has made a significant

contribution to faculty development.

Defining Successful Faculty Development

The definition of faculty development used in this study was all those processes and activities, including the improvement of personal health and management, that contribute to the improved performance of faculty in teaching, research, and administration. This formulation is different from that of Jason, Westburg, Slotnick and Lefever (1982) who focused exclusively on teaching, but similar to views of Hitchcock, Stritter and Bland (1993). The initial definition of faculty development used for this study remains robust and helpful in the conceptualization, design, implementation, and evaluation of faculty development programs. Holloway, Wilkerson, and Hejdek (1997) confirm this choice of definition.

Nevertheless, this study did not attend to the research and administration aspects of faculty development. The priorities of the College of Medicine and the perceived needs of the faculty indicated that the teaching function was the legitimate target of faculty development efforts. As well, this study was initially proposed to the College of Medicine as one focusing wholely on teaching skills, since that was the area of my interest and expertise. Both the College and I, the researcher, were interested primarily in faculty development as help for teachers.

For the purpose of this study, successful faculty development was assumed to be that which helps faculty to become better teachers. In Chapter I and again in Chapter IV, the acquisition of knowledge, skills, and attitudes was the predominant measure of success. Faculty development was perceived as effective if good teaching was the outcome (see Figure 1). Outcomes of faculty development are generally considered to be improved teaching rather than improved learning (Reid, Stritter & Arndt, 1997), although a direct relationship with student learning is usually assumed. The relationship of faculty development to student learning is rarely recognized in the literature (see Tables 1 and 2 for examples of a competency orientation) although some authors do investigate that relationship (Entwhistle, 1991, 1992; Newble & Jaeger, 1983) and I indicated in Figure 1 that the goal of faculty development was improved teaching and learning.

Our research into faculty development led the team (Drs. Spooner and Harding and me) to consider more systematically and more deeply the central purpose of teaching. Whereas at the beginning of the study we had accepted the measure of success of our efforts to be the improvement of teaching, at the end of this study the importance of student learning seemed to be much more prominent. We had assumed that better teaching would result in better learning. My new understanding is that faculty development cannot claim to be successful unless there are improvements in student learning.

Considering Faculty and Instructional Development Together

The relationship between instructional development and faculty development (Cosby,1995; Millis, 1994) as understood at the beginning of this study, was outlined in Chapter I (see Figure 1). The purpose of both faculty development and instructional development was given to be an improvement of the teaching and learning process. In faculty development it is the skill acquisition and performance of the faculty member which is the route to better student achievement. In instructional development it is the students' study habits, courses, and curricula which are assumed to influence student achievement (Cosby, 1995). Together, these two concepts share the common purpose of improving the teaching and learning process.

I chose to focus this study on faculty development rather than on instructional development or a mixture of the two. This delimitation to the study made it more manageable and was intended to facilitate a more penetrating analysis as well. I was able to learn much about faculty development. I also credit this study for helping me to learn that it is best, in both theory and practice, to pay attention to faculty and instructional development together in order to realize successful faculty development. By excluding instructional development from the research focus, I was able to learn about the limits of faculty development.

Faculty and Instructional Development in Practice

Throughout this study it was possible to separate faculty and instructional development.

However, reflecting upon the impact that these initiatives had on student learning, I have come to appreciate the need to address instructional development issues together with faculty development programs. In some situations, faculty development cannot have a positive impact on student learning unless instructional development issues are identified and changes are made to improve the curricula, courses, or student study habits (Cosby, 1995; Entwhistle, 1992).

Maintaining the separation. Throughout this study I was able to focus my efforts on faculty development almost to the exclusion of issues of instructional development. The assumption was that there were both suitable resources and effective instructional methods available for faculty to use and that all that was needed was to figure out how to get faculty to use these methods. I did not lack for quality suggestions and teaching ideas to pass on to faculty who attended the sessions. I did not feel the need to focus on the students' study habits, the course designs, or the curriculum. Although some of these issues were discussed occasionally, the team excluded them from this study in our quest to improve the teaching function of faculty.

The importance of moving into instructional development. Concerns about medical students, specifically the way that medical students are evaluated (Entwhistle, 1992; Newble & Jaeger, 1983), highlight the importance of confronting instructional development issues together with faculty development programs. The examination structure at the College of Medicine is largely based on the recall of information using multiple choice questions. This system encourages cognitive stuffing as a pedagogical approach (Entwhistle, 1992). Under this structure wherein medical students are required to recall facts, the instructors are expected to help them with this task. Students generally want to be filled with information that will help them to pass the multiple choice examinations (Paul, Bojanczyk & Lanphear, 1994). In other words, cognitive stuffing may be what students need and want under such an evaluation system.

This approach to evaluation is firmly entrenched in the educational system of the College though there is some evidence that steps are being taken to align the evaluation system with the ultimate objectives of undergraduate medical education (Medical Council of Canada, 1992). The implication is that faculty development can have only a limited, indirect effect on student learning as a result of the influence of the evaluation system, something that is out of the hands of most faculty members.

Implications for faculty development. This conflict between the ideals of faculty

development and the evaluation structure has important implications for this and other studies which have suggested that faculty development was an answer to the prevailing problem of cognitive stuffing (AAMC, 1984, 1992). One task of faculty development, equipping teachers to help students learn new skills of problem-solving and critical thinking, was intended to create a new kind of preparatory education for doctors, one that would overcome the pervasive problem of cognitive stuffing. I have learned that progressive faculty development, like TIPS, may actually create problems as serious as those it solves. There may be a disservice rendered to the students and also to the teachers who promote teaching methods which emphasize critical thinking and higher level intellectual processes when the evaluation system demands (and rewards) something quite different (Newble & Jaeger, 1983; Paul, Bojanczyk & Lanphear, 1994).

Consider the faculty member who tried something innovative in his or her classroom or teaching situation, a new teaching approach that was learned at TIPS, for example. It was sometimes the case that this new teaching approach was not well received. Many students complained because they were not served in their quest to pass the examination. They might have felt betrayed and become unwilling to engage in other active learning processes. The faculty member may have received poor ratings from the students and become discouraged in his or her efforts to help students learn. Such a situation could hinder further faculty development efforts for that person. The faculty member might choose to reengage in cognitive stuffing to please the students and prepare them for their examinations. In this scenario, faculty development has not helped reduce cognitive stuffing and has been discredited.

Roles for faculty development. This does not mean that faculty development has no value in addressing the concerns raised by the teaching practice of cognitive stuffing. Faculty development can be instrumental in helping faculty members to see the value of higher order thinking skills, to help students learn in their lectures, and to reflect on the purpose of teaching and the evaluation system. In this way faculty development could have a strong indirect effect on the evaluation system. Faculty may become disenchanted enough with the evaluation system that they would be willing to demand that changes be made to it. Faculty might mobilize themselves to place pressure on the medical system to change its evaluation practices(Fullan, 1991; Lucas, 1990).

Faculty development does have a positive effect on some students who are not as

affected by the evaluation system (Entwhistle, 1992). This has been the team's observation at the College. Reducing cognitive stuffing and helping students to achieve some deeper level learning does have an audience, though the proportion of students who are willing to take advantage of innovative teaching methods is small.

Faculty development also prepares faculty to teach in advance of the evaluation procedures being aligned with its terminal objectives. Faculty members need to be ready to teach in a system that supports problem-solving and active learning. It would be confusing, and perhaps even counterproductive, to introduce a revised evaluation system when only a few people are trained to support the new approach.

Quite often the innovation is introduced before faculty development is provided (D'Eon, 1988; Hitchcock, Stritter & Bland, 1992). There is no reason to assume that it must always be so. Faculty development could precede or accompany changes in instructional design and approaches as is the case in the College of Medicine. This top-down and bottom-up approach to educational change (the imposition of instructional innovation together with faculty preparation and demands for change) can be effective (Fullan, 1991).

Faculty and Instructional Development in Theory

Throughout this study the distinction between faculty and instructional development did not seem to be artificial or contrived. Faculty development and instructional development appeared to be two separate and distinct areas of activity. Faculty development focused on the way faculty teach while instructional development considered what faculty work with when teaching. Conceptually, the two can be conceived of as different entities and can be studied in isolation (Entwhistle, 1992). From the findings of this study, this partitioning and independent treatment, although possible, may not be the most effective approach for improving student learning.

To illustrate this complex relationship, I shall use a molecular analogy. Faculty and instructional development are like atoms. They can be studied independently (as is the case for individual atoms) and their unique properties and characteristics understood . Fully appreciating this knowledge at the atomic level, atoms do join to form a molecule which exhibits different

properties and characteristics requiring different knowledge and understanding. Individual atoms are not able to accomplish what a molecule can. This is the case for the faculty and instructional development. Faculty development and instructional development can be studied and understood as separate entities, atomistically, but they are not likely to achieve positive changes in student learning unless they are united as interdependent functions. New understanding is required to manage this integrated approach.

At the beginning of this study, these two concepts were isolated. Now at the end of the study, the new understanding is that they ought to be integrated and not separated for the purpose of theory and practice. This is a reconeptualization of the relationship between faculty and instructional development. Instead of emphasizing the atomized properties, this reconceptualization recognizes a more molecular or integrated understanding of the two. Figure 9 is an advance from Figure 1 in that the connection between instructional and faculty development is more prominently illustrated. Note also that the arrows which indicate that faculty and instructional development affect student learning emanate from the integration of the two and not from each of them separately.

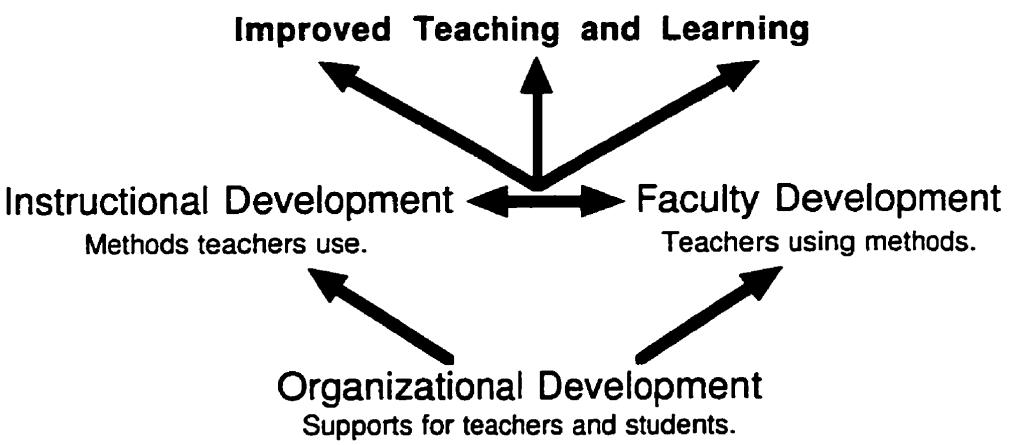

Figure 9: Faculty and Instructional Development in Balance.

This new framework, with its more balanced and integrated conceptualization, shows that

both faculty and instructional development need to be considered as part of the overall plan and program to improve the teaching and learning process. This does not mean that both faculty and instructional development would necessarily receive equal emphasis. A study operating under this framework might begin, for example, with a faculty development component followed closely by some instructional development. Another study might begin with instructional development and early in the process initiate faculty development to support what had been accomplished. Yet another project might find that the instructional development components are in place and concentrate exclusively on faculty development, as in this study. The more balanced framework simply keeps those responsible for the work of strengthening the teaching and learning process aware of the essential theoretical and practical relationship between faculty and instructional development but does not impose a particular focus or approach.

Research Opportunities in Faculty and Instructional Development

There are numerous research opportunities engendered in these implications. For example, what is the impact of effective teaching on students and their learning? We may assume that students access a variety of learning resources to learn what it is they are expected to learn and that these would include, among others, attending lectures, tutorials, and labs; reading texts, lecture notes, and handouts; working with friends; and independent study (Entwhistle, 1992). How do different emphases in teaching affect the learning pattern and learning outcomes of students? How might this pattern be influenced further by the evaluation system and the students' perceptions of the evaluation system? What attitudes about learning and medicine are acquired when teaching and evaluation do not align? Many of these questions have been raised and answered in different learning contexts at the university level; however, there is little research which directs these questions to medical student contexts (Entwhistle).

These questions raised above are technical questions about the relationship which faculty development and instructional development have with their ultimate purpose, student learning. These might best be addressed through a qualitative investigation of students' learning patterns and study life as they have been in the past (Entwhistle, 1992). Interviews of students and professors, as well as observations in classrooms, would help answer such questions. These

questions demand that researchers enter into the lived world of the students to discover, from their perspectives, what learning at a particular medical school with particular instructors is all about.

Further research questions, once these initial ones have been answered satisfactorily, might seek to explain how educational leaders might allocate resources to faculty development and instructional development to achieve the required balance and outcomes for the system as a whole? In the case of the College of Medicine, the Dean and Dr. Spooner had decided that faculty development was the area that required priority consideration. Resources were allocated to support Teaching Improvement Project Systems (TIPS) and to fund Dr. Harding's position in Educational Support and Development (ES&D) as explained in Chapter III. We have learned that some instructional development is required in order to accomplish the goals of improving the educational system and student learning. This is valuable information.

The College of Medicine has recently begun a review of its evaluation system through committee work. This is happening in conjunction the Medical Council of Canada's increasing emphasis on the use of simulations in evaluation. The College is reconsidering its own use of examinations to align them more closely with the terminal objectives (Medical Council of Canada, 1992) and the Medical Council of Canada examination procedures.

Research into change in medical education could try to determine the factors that create impediments to the advancment of system effectiveness. Faculty development is neither a panacea nor an impotent fad. While it may be quite worthwhile for one College to turn its attention to faculty development, this may not be the correct action for another medical school which must consider all options.

An analysis of an educational system would produce a sense of where to begin the work of changing the system to improve the teaching and learning process. Since this project deals with the generation and application of knowledge in a real environment, this might best be approached using action research. This challenge is well suited to many forms of action research each of which has the potential to produce actionable knowledge (Argyris, 1993). An action research protocol which consists of a contextual evaluation (observation and reflection stages of the action research cycle) followed by initiatives in faculty or instructional development or both (planning and acting stages) would likely be an effective research and change strategy.

Reviewing the Framework for Thinking About Faculty Development

A framework for thinking about faculty development was outlined in Chapter II, Figure 2. The nature of teaching as presented in the social practice model was depicted as an important influence on faculty development. Faculty development was shown to be affected by considerations of both performance and competency which were influenced, in turn, by certain organizational and social forces. This framework was used to evaluate the programs of the College of Medicine and to guide the design of others that were implemented as a part of our faculty development initiatives.

In this section I raise some issues which have led me to reconsider the conceptual framework presented in Chapter II. Relying on the strength of the notion of teaching as a social practice, the framework for teaching gave a prominent place to the role of social norms. This reemphasis was made to correct an over reliance in the literature on competency training. This reconceptualization establishes a better balance between the two.

Theory Development with the Social Practice Model

Many authors have grappled with the difficulty of changing one's practice by exploring the social environment wherein teaching takes place (Brookfield, 1986; Brown, Collins & Duguid, 1989; Darling-Hammond, 1996; Little, 1981; Rogoff, 1984; Smylie, 1995; Tillema & Imants, 1995). Each of these authors raised issues and focused attention on important considerations. However, their work is not conceptually linked in a way that is satisfying or powerful. Their ideas seem to be only fragmentary collections of practical pointers. Thinking of teaching as a social practice brings greater clarity and focus to discussions of the importance of the social environment for individual change and thereby opens up possibilities for improved practice and research.

The theory of faculty development has evolved and matured into a performance model (Nowlen, 1988). The idea of teaching as a social practice further enriches the performance model. Performance is enhanced both through the acquisition or improvement of job related and personal management skills and through organizational and social supports. Furthermore, performance is dependent upon previous culturally mediated experiences and competencies.

The social practice model speaks directly to the social and organizational aspects of maximizing performance. The blend of the performance considerations and notions of teaching as a social practice have moved the theory of faculty development further ahead.

Having said this about the social practice model of teaching and faculty development, it is possible to conceive of a more complex relationship between the individual and the group in the formation and use of skills. The social influence was overemphasized early in this study at the expense of relegating individual learning to a minor role. Referring back to Vygotsky's socio-historical psychology (Blanck, 1990), there is a dynamic state of mutual conditioning which takes place between the individual and his or her culture. The influence is not unidirectional. The competencies which an individual learns can influence the group by the same intersubjective and inter-psychological processes as the group's expectations and views of the situation can influence the individual's. Not only are the individual competencies acting on the performance of individual teachers, but they are influencing other teachers. In agreement with this view, Nowlen (1988) expresses an interaction effect which takes place to form the unique individual. The point is to maintain a focus on competencies in faculty development. If in fact the theory is advanced in this area it would be to reinforce the centrality of balance between considerations of individual competencies and social expectations.

Individual Competencies and Social Norms: Striking Another Balance

The concept of teaching as a social practice, based on the work of Overgaard (1994), was introduced and integrated in an original way into notions of performance and competence (Nowlen, 1988) in Chapter II. The ideas advanced by Overgaard were instrumental in constructing a framework to illustrate the importance of the social environment for the transfer of skills from training session(s) to the workplace (see Figure 2). By starting this study from an understanding of the nature of teaching and developing a framework of teaching as a social practice, new and powerful insights into faculty development were made possible that were not otherwise as accessible.

On the other hand, I have learned that an overemphasis on the social dimension of teaching can overpower the more tangible concerns of technical and reflective competency. In

spite of the importance of the social dimension, teachers still need to be skilled professionals. Even the social practice model of teaching includes a rational component of teaching, the aspect of teaching that relates the purposes with activities and other components of the model.

Thinking about teaching with a distinct focus on means and the pursuit of efficiency denotes the technical enterprise model of teaching. The craft notion of teaching is characterized by reflection-on-action (Schon, 1987). As stated in Chapter 2, both of these views are only incomplete notions of what teaching is. They are not to be considered incorrect, just unfulfilled conceptions of teaching. They include within them kernels of truths about teaching, truths which are encompassed within the social practice model. This means that attention needs to be given to the competencies of teachers, either in a technical or craft sense, as well as to the social and organizational dimensions of teaching.

Learning new skills is often accomplished in a part-whole process (Joyce & Showers, 1982). Learning the skill in isolation is mastering the part. Once skillful performance is demonstrated in the simple context, it is then put into a more complete and difficult context. This part-whole process is continued until all the parts are mastered in context and can be performed in the real situation. The skill in isolation may be thought of as the various competencies which teachers are expected to acquire to teach effectively and has been the focus of the technical conception of teaching. The skill in context is likened to the teacher working with a real class or group of students in an actual teaching/learning situation and has generally been the concern of the craft approach to teaching. This latter phase, the assimilation of learning into the repertoire of the teacher requires both coaching and social interaction, not just one or the other. This illustrates the need to integrate concern for both individual competencies and the impact of social norms.

The models of professional development presented in Table 1 (Gall & Vojtec, 1994) and those from medical education in Table 2 (Hitchcock, Stritter & Bland, 1993) recognize the importance of coaching for improved performance. Coaching as a strategy for helping to transfer learning and complete the faculty development begun in workshops (Joyce & Showers, 1982; Makibbin & Sprague, 1997) was not given the attention it may have deserved in the team's evaluation and design of faculty development programs. In the rush to showcase a novel approach to faculty development (the social dimension as expressed in the social practice model)

the necessary focus on competency was overshadowed, and to some extent, overlooked.

It became clear, in the course of working with teachers at TIPS and at half-day workshops, that workshops alone were insufficient faculty development opportunities. Faculty needed more practice and coaching in real teaching situations. The suggestion to have participants at TIPS work more closely on an actual teaching assignment is one example of how we tried to promote the transfer of the learning experience to the actual job setting through coaching. An innovation to be attempted with the fall 1997 version of the College of Medicine's faculty development program is to expect participants to attend an ISG once during the term and to commit to having another faculty member act as a peer coach for at least one lecture. These recent modifications have been instigated to direct more resources and energy to considerations of competency in teaching and to restore more of a balance between the dual concerns of individual learning and the influence of social norms in the performance of teaching.

Implications of the Balance Between Individual Competency and Social Expectations

There are several implications for theory development, the practice of faculty development, and research which present themselves when considering both individual competencies and social expectations as interdependent. Certainly the social practice model has moved theory development in a different direction. But, to move it ahead, to actually have integration on a theoretical level that was better than what existed before and not simply different, both the individual competencies and the social expectations must be taken into account, not independently, but together. To avoid erratic pendulum swings that emphasize first one then the other, both need to become permanent components of faculty development programs. Several research questions also emerge as a result of these reflections.

Evidence that TIPS contained several elements consistent with the implications of considering teaching to be a social practice added evidence that TIPS was a valuable workshop. This helped to explain, in part, why TIPS has been successful at the College of Medicine. The significance of the ISG was also demonstrated by reference to considerations of teaching as a social practice. It was the idea of teaching as a social practice, along with other theoretical research, which resonated with intuitive notions of "colonies" held by Dr. Harding and which

increased support for ISG. Thinking of teaching as a social practice helped to make sense of both TIPS and the ISG and was a factor in continuing to offer these as part of our faculty development program at the College.

Recognition of the importance of thinking about the central purpose of teaching has helped to improve the TIPS workshops. The opening orientation to teaching and learning has been modified slightly in accord with the theory of teaching as a social practice. Conceiving of teaching as a social practice was also a factor in deciding to include an overview of teaching and learning (similar to the orientation to teaching and learning given at TIPS) as a prerequisite to the half-day workshops. The practice of faculty development has been improved by making some changes to TIPS that are implications of our thinking about teaching as a social practice.

To these considerations emanating from the social practice model of faculty development can now be added the coaching elements of the TIPS and half-day workshops. Faculty developers must be aware of the importance of coaching (Hitchcock, Stritter & Bland, 1993) and clinical supervision (Gall & Vojtec, 1994). Clinical supervision is featured as one of the six research-based models of staff development included in Gall and Vojtec's (1994) synthesis, and coaching is also included as a part of the skill-training model. Coaching is mentioned by Hitchcock, Stritter and Bland (1993) as part of the short programs. Clearly, the literature supports the concept of coaching for the transfer of skills to the work setting. Creating a balance between coaching for transfer and the influence of social norms will help to avoid wild swings of a pendulum where social expectations and coaching for competency are two limits.

Balancing Individual and Social Factors: Areas For Further Research

The implications for the practice of faculty development of conceiving of teaching as a social practice can be the object of further research. Since faculty development sessions which accommodate discussions of purpose and accepted ways of teaching is time consuming (and therefore expensive), research is needed to further justify the investment in the activity. This social practice model has led to changed practices in faculty development at the College of Medicine. As a part of this study, research was done on a continuous basis to monitor and account for the success or failure of these faculty development programs. To learn more, each of

the specific components of the model could be explored in greater depth. Also, faculty development which accounts for the importance of norms for practice of teaching could be compared to faculty development that does not. Research could be undertaken to tell us under which conditions and to which extent the norms of the practice account for any variance in the outcomes of faculty development sessions and programs. Incorporating considerations of the social practice model are difficult both conceptually and practically and the substantial effort required needs to be justified.

A great deal of promise for effective faculty development has been given to coaching (Makibbin & Sprague, 1997). This research could be challenged by also considering the effect which the social expectations have on the transfer of learning to the classroom or actual teaching setting. It is possible that much of the success of coaching has been due to certain social influences. The importance of social expectations was established when notions of teaching as a social practice were discussed. This is not to say that coaching may be found to be ineffective, but that there may be other mitigating factors influencing performance, notably the social norms highlighted in the discussions of teaching as a social practice (Overgaard, 1994) and the formative cultures which feature prominently in the performance orientation to faculty development (Nowlen, 1988).

Another aspect of research that might prove worthwhile would involve discovering the effect which a growth in competencies could have on the formation, or more correctly, modification or redefinition of social norms. Teachers, thoroughly trained and versed in the latest research-based methods to help learners, could have a profound effect on the expectations for teaching excellence and practice. We have seen that newer faculty members may have higher expectations for teaching performance than longer term faculty (see Appendix C-14 and Chapter V), and have speculated that these expectations may eventually conform to the generally lower expectations. It is possible to advance the case that the norms of the newer faculty will become the norms for the College in the future and rather than succumbing to the other, they will prevail. This relates to what Rogers (1962) says about the diffusion of innovations beginning with risk takers and what Fullan (1991) writes about in educational change. In this sense, faculty development that is heavily competencies based might become the catalyst or engine for the redefinition of social norms that govern teaching. This speculation deserves further research.

Faculty Development Workshops

As described in Chapter IV, the TIPS workshop has been improved by applying the social practice model. In this next part I sketch the importance of TIPS and the other workshops for the medical education community.

TIPS: An Answer to "Cognitive Stuffing" in Medical Education

The first problem with medical education that I described was the pedagogical approach termed cognitive stuffing. The predominance of rote memorization and information delivery through passive lecturing has been condemned for years, yet to little avail (AAMC, 1990; Small, Stevens & Duerson, 1993). Some medical schools have moved to a problem-based learning curriculum (Walton & Matthews,1989) in an attempt to rectify this problem. This grand experiment is still being tested (Newble & Clarke, 1986). At this time, it is expensive, risky, and a monumental undertaking to change from a traditional approach to teaching and learning to problem-based learning.

The TIPS workshops effectively address the dilemma of cognitive stuffing. There is some evidence that TIPS can make a difference in the teaching practices of medical school faculty. This discovery, which has been long believed by TIPS proponents, can now be used to further promote the workshop to the medical education community eager to overcome cognitive stuffing. They are likely to respond enthusiastically to the research pointing out that TIPS has changed teaching practices at the College. Whether they embrace the TIPS workshop itself or prefer to use a similar model of a different workshop, the medical education community will see this as an opportunity to enrich their educational programs through the development of the effectiveness of their teachers.

Of course, it must be pointed out that faculty development alone may not be sufficient to completely correct the problem of cognitive stuffing. A potent strategy must include an instructional development component in concert with faculty development. Each one is necessary for the improvement of the educational system but neither one can succeed on its own. While effective faculty development such as TIPS is not sufficient to address cognitive

stuffing, it is necessary. The faculty development community will be interested to know that TIPS can help change teaching behaviours in medical school faculty.

A Modified TIPS Workshop

The TIPS workshop which we now offer is a modified version of the original. Through this action research project, the TIPS workshop has been changed, and I believe improved. The opening overview is more focused on the central purpose of teaching. The focus of the workshop on an actual teaching assignment helps bring the learning into the workplace through integrated transfer strategies (Zemke & Zemke, 1995). There is now more time given for participants to work on a teaching plan assisted by the TIPS faculty which ought to lead to increased learning on the part of the participants (Joyce & Showers, 1988). Early perceptions by Drs. Spooner and Harding are that this enhanced TIPS is more effective. The latest developments which include follow-up with ISG participation and coaching may make the TIPS workshop a model of effectiveness and has attracted the attention of some in the medical education community in Canada.

Half-Day Workshops

The faculty development program of half-day workshops, which we developed and delivered, could form a model for other medical schools with similar resources and characteristics as the College of Medicine. The sessions have been derived from a rigourous needs assessment process and the selection of workshop topics was being tested as we offered the program. We received comments and information about the quality of the sessions and impressions of what faculty really needed for teaching support. I am confident that this faculty development program will continue to improve to meet more fully the needs of faculty and ultimately, students. Other medical schools could benefit from our experiences and use or adapt our program.

Organizational and Social Supports for Teaching

The social and organizational supports for teaching were discussed in detail in Chapter V. In this section I highlight the significance of the research for a renewed understanding of the importance of these supports. I first deal with the sources of institutional support, Academic Leadership workshops, and then the Instructional Study Groups (ISG). Bogdewic, Baley & Jamison (1997) validate the choice of these two arenas. They highlight the need to provide systems management skills for faculty leaders (Academic Leadership) and encourage peer coaching (ISG). The needs assessment is reviewed for its organizational implications and the delimitations are reconsidered.

Sources of Institutional Support

The need for institutional support for faculty development has been well documented in Chapter III (Astin & Chang, 1995; Bland & Holloway, 1995; Eble & McKeachie, 1983; Hitchcock, Stritter & Bland, 1993; Lucas, 1994; Seldin, 1990; Weimer, 1990). Sources of support were identified as faculty members, department heads and deans, and committees of faculty. In this section I will comment on the degree and level of support received from these areas of the College with a view to relating the action research protocol experiences to the literature.

Individual faculty members. Faculty were generally supportive of the faculty development program. They registered for the sessions and commented that they were worthwhile. Many of them voluntarily participated in the action planning process that is still unfolding (see Chapter V). As discussed in an earlier section of this chapter, through the developmental workshops in teaching which were offered, faculty may also become more active in applying pressure so that needed changes to the educational system are made, for example, the evaluation structure. Support for other reforms may be kindled within faculty members through further faculty development. This simultaneous advancement of the educational system and individual faculty members through faculty development may prove to be a potent force for change (Fullan, 1991).

Department heads and deans. As indicated in previous chapters, the Dean has been a champion of the cause of faculty development and was responsible for bringing this study to the

College. He has been unwavering in his support for the faculty development initiatives undertaken at the College. As Dean he was able to influence certain decisions and play an important role in allocating resources to faculty development. Our findings confirm the literature which identified deans as key sources of support.

The department heads have generally been strong supporters of faculty development initiatives. They have expressed the need for their faculty and themselves personally to participate in faculty development opportunities. Department heads have participated in the academic leadership and action planning sessions organized for faculty leaders. Although some departments and some heads are more progressive and more determined to actually make teaching and faculty development a priority, there has been strong support from this group. Department heads should still be considered sources of institutional support.

Committees of faculty. Committees of faculty can be a great source of support for faculty development. This was not the case in this study. As reported earlier, the Committee for the Development of Effective Teaching (CDET), initially gave a cool reception to the idea of the study although they were interested in faculty development. A few months after the study began, perhaps from the stress of having to cope with the opportunities presented by this study, they temporarily ceased operation. The committee is in the process of regrouping under new leadership. Although this study affirms the value of faculty committees to support faculty development as outlined in the literature cited above, there has been little opportunity to test this hypothesis and learn about the importance of committees of faculty.

Academic Leadership

The Academic Leadership Workshops have been well received at the College of Medicine and they have had an impact on the organizational environment (see Chapter V). This impact was not in the areas predicted or in those hoped for. The impact was not as strong as was indicated at the planning stages. Nevertheless, this program ought to be of interest to other medical schools. I have demonstrated, with a review of the literature in Chapter II, that attention to the organizational environment is crucial to faculty development efforts. It is important, then, not to abandon efforts to influence that environment. The literature indicates that the benefits are

very high even if the effort required is great. The Academic Leadership Workshop has been judged by the Dean of the College of Medicine and other faculty as worth attending. That endorsement ought to attract the attention of other medical schools interested in enhancing their own faculty development and educational programs.

In terms of theory development, this study confirms the views of Seldin (1990) and Cresswell, Wheeler, Seagren, Egly & Beyer (1990) that changing the organizational environment of an institution is a long-term, painstaking administrative challenge. The heightened expectations for the Academic Leadership Workshops coupled with the realization that participants had not gained as intended and that little had changed as a result, made a powerful point that cultures are not easily manipulated.

This conclusion of seeming futility might cause those working for change in the educational system to abandon all efforts to influence the environment in which faculty development and teaching is conducted. Change agents might become inclined to abandon their work with faculty leaders on complex, seeming intractable issues and challenges. In my opinion, this would be an inappropriate response. As mentioned in Chapter V, doing something, though it may not, on its own, precipitate the intended changes, has the effect of signalling what is important and helps to actualize the changes it intends by triggering other events. The Academic Leadership Workshops, or other such interventions, could become a catalyst for changes in undergraduate education and simply by their presence in the College help to recreate an organizational environment conducive to teaching and teaching improvement.

This hypothesis ought to be subjected to serious, longitudinal research in an attempt to determine the processes by which organizational climates (Owens, 1995) change. Such research would have the task of determining which factors played a part in the change, and to what extent each was responsible for facilitating or impeding the changes (Guest, 1984; Lewin, 1952; Marrow, 1977). Research would need to address the direction of the change as well as its strength. Perhaps conclusions could be drawn regarding the factors which contribute to the evolution of organizational supports for teaching.

Instructional Study Groups Reconsidered

These innovative faculty development sessions are supported heavily by the literature on faculty and professional development (Bland, 1980; Francis, Hirsh & Rowland, 1994; Guskey, 1995; Joyce & Showers, 1988; Makibbin & Sprague, 1991). They have been and are being tried at the College of Medicine. This field test may be of interest to other medical schools and medical educators, in particular. If we can demonstrate their usefulness, then medical educators looking for effective ways to improve teaching without requiring great amounts of resources, might do well to consider the ISG.

The theory behind ISG. The previous discussion on the balance between individual competencies and social expectations applies particularly to ISG. ISG were first considered to be prime areas for teachers to confront social norms which governed teaching. Now, having raised the issue of bringing individual competencies into balance with considerations of social expectations, we can view ISG in a different light. ISG then also become important, however informal, coaching opportunities. In ISG there is in one structure the juxtaposition of social and individual elements of faculty development.

The real value and effectiveness of the ISG may be in this dual function. Teachers studying their practice together coach each other, often informally, and receive advice and suggestions that are helpful to both parties, the recipient and the sender (Makibbin & Sprague, 1997). At the same time and in a mutually conditioning relationship, the social expectations of the teachers are challenged and molded. ISG embody the balance between considerations of the social norms and individual competencies.

Practice of ISG at the College. The ISG experience at the College of Medicine has been somewhat disappointing in that only small numbers of people have actually made use of these faculty development opportunities. In the estimation of the team, those ISG that did take place were sufficiently successful to warrant continuing with them in future faculty development programs. Current plans are to communicate the expectation that participants at any of the workshops attend an ISG at least once during the term to ensure that there is some follow-up after the workshop experience. The team's faith in the effectiveness of the groups has not waned and we are exploring new ways to integrate them into our faculty development sessions. Using the

ISG as follow-up coaching is an innovation that includes a definite social dimension to coaching and could improve the practice of faculty development.

My experience at the College has led me to believe that the ISG ought to be less formal than that recommended by Makibbin and Sprague (1991) who were writing for a public school professional teacher audience. ISG have worked best when they were open to anyone to attend, when they were shown to be inviting and not just another type of work. Perhaps some refreshments and a pleasant view would add atmosphere to reduce stress and open up the discussion. Certainly with the varied schedules and time demands placed on faculty, and their multiple responsibilities, we can not make rigid demands for attendance but need to rely on making the ISG attractive enough for people to want to participate.

Research into ISG. It is clear that we need to know more about ISG. In their dual role as coaching opportunity and social cauldron, we need to determine when and how each of the functions is present and how they influence each other. This is a similar problem to that of finding the balance in faculty development programs between individual competencies and social expectations discussed earlier in this chapter. However, what makes this research different is that both of these elements are found within the same structure. ISG may prove to be a microcosm of faculty development where the balance between the transfer of learning on the part of the individual and the influence of social expectations are played out. Researching the journey of participants in their thinking about teaching and their performance as teachers could give insights into faculty development processes.

Another question is about the effective use of ISG at different stages of the faculty development experience. Would they be best for beginning teachers, those who are most experienced, or all in a heterogeneous arrangement? How would they work best, and in combination with which other kinds of faculty development opportunities? Numerous such questions of a more practical nature need to be answered, or at least addressed, to help in the quest for the most effective mix of faculty development experiences (Guskey, 1995).

Needs Assessment of Forces Which Facilitate or Impede Effective Teaching

The data uncovered by the needs assessment survey on the forces which facilitate or

impede effective teaching are rich and can form the starting point for thoughtful reflection and effective action planning. This process has, in fact, begun as outlined in Chapter IV and V. Here I review the contribution of our needs assessment to what we know about improving teaching.

Incentives and disincentives for teaching. The basis of administrative decisions for merit increases in salaries, promotion, and tenure have been raised again in the needs assessment, the department heads nominal groups (January 1996), and the action planning sessions. This issue has been consistently identified by faculty as a key one.

Other administrative issues were raised through the needs assessment. First, faculty felt that they were rushed and that teaching was a low priority; some therefore devoted little time to this activity. Second, many faculty did not have confidence in the student evaluations. This draws attention to the whole issue of evaluation of teaching and how it might best be handled to promote excellent instruction. Third, there were some financial disincentives to teaching that were experienced to various degrees by different faculty. The fact that clinical faculty subsidize their teaching through clinical earnings was a subject of attention at the action planning sessions. The question of changing the arrangement for clinical earnings is a difficult problem with respect to improving teaching; any solution may adversely affect some faculty members.

As was mentioned earlier regarding Academic Leadership, efforts to resolve these administrative and organizational issues may take much time and effort. Furthermore, all that work may not produce early evidence of real change and may not even show evidence of progress in the longer term. It will take resolve and determination to engage in strategies to change the organizational climate of the College.

There are theoretical and practical implications for the discoveries that have been made in this study about the motivation of faculty. The importance of the intrinsic motivators has been confirmed. This leads to the practical implication that attention be paid to the more elusive incentives to excellent teaching.

Theoretical implications. The question of the rewards of teaching, demonstrated so clearly by the results of the needs assessment, deserves careful reflection. Through the needs assessment we found that the intrinsic motivators were considered by faculty to be the most powerful. Incentives such as intellectual stimulation, contributing to society, and witnessing student learning were rated highly (see Appendix C-12). This confirms the present state of theory

development in the area of motivation (Baldwin & Krotseng, 1985; Ames & Ames, 1984). The confirmation of the importance of the intrinsic motivators for medical school faculty will be of interest to the medical education community wanting to learn more about the theoretical aspects of the question.

Practical implications. It behooves those who control incentives to make these intrinsic motivators more widely available and more salient. Although extrinsic incentives, such as recognition and awards, were not rated as highly, it may be advantageous to try to increase the availability of these as well. All of this will take administrative effort and time with little guarantee of success.

New faculty. The needs assessment uncovered some interesting differences in the perceptions of newer faculty as opposed to longer term faculty. There were differences in interest for faculty development which highlighted the need to support the new faculty member in the pursuit of excellence in teaching. There were also interesting and significant differences in perceived expectations for effective teaching. Faculty who had been employed for less than 10 years at the College of Medicine expressed the perception that the norms among faculty and the expectations of administrators for quality teaching were low. One possible explanation is that newer faculty had higher standards for teaching than the prevailing standards of either administrators or other faculty. This is one way to account for the lower mean of newer faculty members on those two items.

The possibility that newer faculty have a higher standard for teaching quality underlines the urgency of supporting these newer faculty before they become more accepting of the lower standards, become discouraged, or are attracted to other universities. It is prudent speculation to suggest that the environment of the university, the medical school in particular, might have an adverse effect on the teaching standards of faculty. This possibility ought to be further investigated and, if confirmed, brought to the attention of those who are able and willing to make some changes to prevent newer faculty from becoming chronically under-achieving teachers. As discussed earlier in this chapter, it is conceivable that the norms of the newer faculty may one day become the College standard.

Other Delimitations Re-examined

By design, this study was limited in its scope. Two major delimitations related to faculty development for teaching and trying to hold instructional development innovations constant with the related delimitation of concentrating on teaching skills rather than student learning, have already been reexamined. The other delimitations outlined in Chapter I were related to problem-based learning (PBL), learning organizations, theory of professional practice, and to the issue of generalizability to other medical schools. In this section I briefly explore each one of these in turn. The conclusion is that these delimitations did not hamper the study.

Problem-Based Learning

A small number of medical schools have introduced a problem-based learning curriculum as an "antidote" to cognitive stuffing (Walton & Matthews,1989). In spite of the controversy over which curriculum is more effective (Newble & Clarke, 1986), I chose not to try to learn about faculty development for PBL or to compare the conditions and processes of faculty development for these two very different types of curricula. Although such information might have been useful for the medical education community, and may still be, this decision did not hamper the study or detract from its findings.

Learning Organization

Similarities among the concepts of a learning organization, action research, and evaluation (Wildavsky, 1985) were recognized but not explained. These interrelationships are more thoroughly described by Patton (1997). The concept of a learning organization, although it did surface at points during the study, was not an on-going concern of this research. Several implications for research and practice have been generated and action research was found to be an effective and robust methodology for learning about faculty development. The narrowed focus of the study was maintained with success.

Theory of Professional Practice

The theory of professional practice, particularly that of the social practice model (Overgaard, 1994), has figured largely in this study and has contributed much to its theoretical and practical aspects. Although there has been some discussion of the implications of this approach and the need for a balance with individual competencies, this study has not been centred on the theory of the professional practice of teaching. The focus of this study has been consistent throughout and notions of the professional practice of teaching have been supports to the study, not its centre.

A Particular Medical School

The generalizability of the research to other medical school sites is a question for debate. Certainly it is up to those in the medical education community and those working in other sites to determine the similarities between this and other Colleges. It has not been the task of this study to assess the other sites to determine the generalizability of the results and conclusions. This task is left to others interested in this research.

On the other hand, there are certain conclusions that are also supported in the literature which enhance their generalizability to other sites. These ideas in both practice and theory ought to be assessed by personnel in each setting and decisions made which are best for that particular medical school.

The Importance of This Research for Faculty Development

This study has added to the stock of knowledge about faculty development. First, the importance of keeping faculty and instructional development in balance, particularly crucial for the action researcher, has been noted. Second, through the introduction of the concept of teaching as a social practice and its extension, on striking a balance between individual competencies and social expectations, both theory and practice have been enriched. Third, this study has made an

impact on the practice of faculty development at the College of Medicine. Other medical schools may well use similar ideas and structures for faculty development, including both TIPS and half-day workshops. Fourth, the work that has been done in the area of organizational supports for teaching which included ISG and Academic Leadership Workshops has also advanced the theory and practice of faculty development. Last, the needs assessment has raised issues of incentives and disincentives for teaching which bear strongly yet indirectly on faculty development efforts. In these ways this study has made an important contribution to faculty development.

Action Research

In this section some of the ways in which the practice and theory of action research has been enriched through this study are outlined. Action research is a robust methodology. My contributions to it, though modest, lie predominantly in incorporating the theory and practice of evaluation.

The Practice of Action Research in This Study

The exchange between evaluation studies and action research has the potential to greatly enhance the effectiveness of both. As pointed out in Chapter III, this relationship is not prominently portrayed in the literature. Writers from both fields rarely acknowledge the similarities and sometimes perpetrate misinformation (Huberman & Cox, 1990) although Patton (1997) has recently elaborated on this association. This study, both in theory and in practice, clearly shows the relationship between action research and evaluation studies. This is one of the major discoveries and accomplishments of this study.

In this section I outline the effectiveness of the action research protocol to help learn about faculty development. I note the way that theory has been developed for action research through this study. In particular I draw attention to the value of the iterative stages of the action research cycle. I conclude by suggesting ways that further research into action research might be

conducted.

The Effectiveness of the Practice of Action Research

This action research project has been successful in generating knowledge about faculty development and helping the College of Medicine to make some beneficial changes to its faculty development programs. An action research project may be used by other medical colleges for similar purposes. In this section I will describe the capability of action research to produce important knowledge for the field of faculty development.

As noted earlier, the research that was conducted at the College has yielded data which should be of interest to the wider medical education community. The TIPS workshops, needs assessment, Academic Leadership and ISG , and the integration of faculty and instructional development are examples of research areas which produced valuable information. The action research protocol was successful in generating useful knowledge about faculty development.

In particular, the stages of the action research cycle have proven to be a worthwhile approach to improving faculty development. The systematic pursuit of information through the action research stages was manifest in the contextual evaluation of the College, the evaluation of the TIPS workshops, and the continual evaluation of the programs which were initiated. Furthermore, it was this information which provided the basis and the confidence with which to plan and implement the programs designed to enhance faculty development. Without these data and the conclusions which were reached from them, the faculty development programs would not be of the same high quality. It has been the application of these stages in the study which has been of great benefit to the College.

Working in real environments with problems that matter to people's lives is especially suited to action research (Eizenberg, 1991; Stone, 1980). Discoveries were made and practice improved for the College of Medicine. These advances may or may not reach other medical schools; this does not diminish the value of the data and findings. Real problems can be solved and real situations changed by the application of an action research project, or perhaps by learning from the one which I undertook at the College of Medicine.

Guidelines for conducting action research. Action research is a well documented

research methodology as described in Chapter III, especially from a theoretical perspective. There is, however, a paucity of clear and specific guidelines for the conduct of action research. There are few admonitions or suggestions as to what constitutes appropriate practice. This might leave action researchers, as it left me, wondering what one was supposed to do exactly, or at least what the choices were. Some kind of guidelines would have been practically useful information to me in the conduct of this study.

In the field of evaluation, on the other hand, there appears to be a great deal of practical direction and some theoretical development as well (Brunner & Guzman, 1989; Patton, 1980, 1986, 1997; Provus, 1972; Scriven,1967, 1991, 1994; Stake, 1967, 1975; Stufflebeam, Foley, Gephart, Guba, Hammond, Merriam, Provus,1971). Having shown that both action research and evaluation are closely related and conceptually linked, as I did in Chapter III, this means that action researchers now have access to the guidelines for practice used for evaluation studies. The action researcher must not stop there, of course, since action research is so much more than evaluation. However, the action researcher would be wise to consider the valuable suggestions coming from the field of evaluation.

The practical guidelines from the evaluation literature were used in this study and should give action researchers confidence in using them where appropriate in their own settings. For example, the needs assessment survey, review of previous documents and reports, and interviews were data collection methods suggested and used by the evaluation community as reflected in the literature (Brinkerhoff, Brethower, Hluchyj & Nowakowski, 1983; Henderson, 1978; Joint Committee on Standards for Educational Evaluation,1994; Patton, 1980, 1986). These practical recommendations proved useful in this study and indicate that there are valuable resources for action researchers in the evaluation literature.

Ethics in action research. The discussion of ethics in action research has been advanced by the integration of standards from related professional groups (Gellerman, Frankel & Ladenson, 1990; Joint Committee on Standards for Educational Evaluation,1994). Although there have been articles written about the ethical concerns of action researchers (Bennis, 1963; Rappoport, 1973), the discussion has not been systematized as in a code of ethics which both evaluation and organization and human systems development (OD-HSD) have. Considering the similarity between action research and both program evaluation and OD-HSD, the use of their ethical

standards has been justified in theory, and applied with good results in practice. Action researchers searching for ethical guidelines for practice can now look to program evaluation standards and the OD-HSD profession as well as the relevant literature. This opportunity was not clearly identified before this study made it available.

Although this study can only point the way to such use of the standards, action researchers can have some confidence in this recommendation. The standards for ethical conduct of evaluations were discovered only as this study was nearing completion. The standards were applied retrospectively to help evaluate the study, not guide its conduct. The exercise of using the standards to assess the study proved useful and was one legitimate application of the standards. On the other hand, the standards were not used to steer the work which the team did so that only by inference can the standards be recommended for use in guiding other action research studies.

The integrated relationship between faculty and instructional development creates an ethical dilemma for the action researcher. The action researcher tries to straddle, indeed merge, two worlds: research and action. The initial distinction between faculty and instructional development was useful in delimiting this study and therefore, for the purposes of research, presents a neat, manageable unit. It is easier to study faculty development or instructional development in isolation. Nevertheless, the action researcher is also concerned with making changes of benefit for the client group. In order for the action researcher to facilitate change, both faculty and instructional development need to be advanced interdependently. Engaging one without the other may even be counterproductive, as demonstrated above. Once again the action researcher is caught in a dilemma related to priorities and focus (Bennis, 1963; Rappoport, 1970): effective research with neat distinctions or effective action with multiple variables and interrelationships.

Theory Development in Action Research

There are opportunities for theory development concerning action research. These lie in the areas of learning from experience and the action research cycle.

Learning from experience. The unifying theme for both action research and evaluation

has proved to be the notion of learning from experience. This powerful way of thinking about learning which appears to be a phenomenon which permeates both action research and evaluation theory and practice unites the two of them under one rubric. Rather than distinguishing between the two of them and highlighting their differences in an attempt to maintain some kind of methodological purity, this new unifier - learning from experience - draws them both together so that they can enrich each other. Through dialogue among theoreticians and practitioners alike, the eclectic position that there are many ways for individuals and groups to learn from experience will lead to a more varied set of approaches and more flexibility in tailoring the experiences to suit the learners.

The notion of learning from experience with its reliance on the concept of schemata (Gioia,1986; Gioia & Sims, 1986) has shown potential to illuminate the actual processes which undergird action research. In Chapter III this relationship was raised. Now, in reflecting on the study, this connection has maintained its power to explain the learning which has taken place at the College through the action research cycles.

The first stage of the cycle, observing, is the opportunity to assess the situation. According to the theory of cognitive schemata (Gioia,1986; Gioia & Sims, 1986) assessment is done through the filters of what was known before. Certainly this may have been the case with the College of Medicine. Previous reviews were used and the TIPS workshops were evaluated. Such an investigation could yield an interesting refinement of the theory of action research.

The action research cycle. The reformulation, or rather adaptation, of the action research cycle which was made for this study, based on many models but Stone's (1980) in particular, has proven to be an advance in the theory of action research. The initial stage of the cycle ought to be observing, understanding the situation, followed by reflection, which could be thought of as setting the problem (Stone) and not some other stage or stages. Carr and Kemmis (1986) think of action research as a controlled intervention with the stages of planning, acting, observing, and reflecting. Their approach does not give adequate attention to the preparatory phase of observing and reflecting before attempting a controlled intervention. The model advanced in this study critiques that of Carr and Kemmis. The formulation used is reinforced by the evaluation literature (Huberman & Cox, 1990; Patton, 1986; Stufflebeam et al, 1971) which stresses the need to do a contextual analysis before proceeding with recommendations for interventions or

changes. This study will help to resolve the various different conceptualizations of the action research cycle, in particular by stressing the need to begin with the observation and reflection stages.

The action research cycle itself has been an effective way to think about the research that was conducted and to help plan the various component parts. The stages of observing, reflecting, planning, and acting formed a useful framework that we used to give meaning to our activities. When certain activities seemed to be the best course of action, such as a needs assessment, this was easily conceptualized as the observing and reflecting stages of the action research cycle. Moreover, there was a future use and purpose to our ongoing activities expressed in the next sections of the action research cycle. Observations were made and reflections conducted for the purpose of planning and and implementing faculty development initiatives. Planning and instituting programs and interventions were made with the understanding that observations and reflections would be conducted. These resultant observations and reflections were then presumed to have the purpose of improving what we had started. The cycle and its four stages proved to be a useful framework for organizing the work of this study.

Research on Action Research

The more that researchers take upon themselves the task of using an action research protocol, the more data that can be collected on the efficacy of the revised formulation of the cycle and the close association with evaluation. Action researchers themselves, eager to improve their practice, can reflect on the new way of thinking about and conducting action research. Experienced action researchers in particular would be able to give informed judgments about the relative merits of the reformulations. As well, besides the subjective reflections of researchers, comparisons of the results that accrue to a new way of doing action research, though not in a controlled experiment, would give some evidence of improved practice.

The usefulness of the guidelines and ethical standards for conducting action research are candidates for research and systematic inquiry. How can they be used proactively to enhance future studies? How do the guidelines affect the nature and practice of action research in various

settings? These questions have only been raised by this study as proffered as worthy avenues for further research.

The value of the action research cycle as used in this study could be further investigated. Although suggested here as a worthwhile formulation, its use in various situations and circumstances needs to be determined. Under which conditions is it best to begin with an intervention in the planning and acting stages? How does the client system or group and its development affect the initiation of the action research cycle? Might there be cases where it would be best to begin in a different way than was done in this study? Again, these questions are only raised for other research projects to undertake.

In the development of theory, more needs to be known about the way that action research works psychologically and interpsychologically (Blanck, 1990, Gioia,1986; Gioia & Sims, 1986). How do people learn in groups and individually through an action research protocol? Is it useful to think about schemata and the influence of prior learning? What role does the researcher play in the way that the client group or subjects of the study learn? Is action research actually an effective way to learn from experience as was suggested in this study? Perhaps there are more efficient or successful ways? These questions have only been raised by this study in trying to learn about faculty development through an action research protocol.

The Importance of Action Research for This Study

This study has demonstrated that action research has been an effective methodology for leading to the discovery of knowledge about faculty development. Part of this success is due to the use of evaluation methods as part of the action research protocol. Combining evaluation with action research gave better, more easily followed, and more explicit guidelines for actually conducting the research at the College. This amalgamation of evaluation and action research resulted in a stronger study and has the potential to enrich the practice and theory of both action research and evaluation.

Action research is better conceptualized, along with evaluation studies, as a way of learning from experience. Another development to the theory of action research is confirmation

that the action research cycle begin with the stages of observing and reflecting. Research into action research needs to be conducted to determine other benefits or costs involved in the conceptual and practical union with evaluation research.

Concluding Comments

The central purpose of this study was to learn about faculty development through an action research protocol in a medical school setting. Much has been learned about faculty development in both theory and practice as outlined in Chapter IV and V and summarized in this chapter. This information is important to the College of Medicine of the University of Saskatchewan as well as to the medical education community in both its theoretical and practical aspects. Much has also been learned about action research, specifically that it is effective for generating knowledge about faculty development and that it is strengthened in its specific methodology and its ethical guidelines by a limited union with evaluation. The strategy of studying and improving faculty development through action research in a medical school setting has been rewarding and effective.

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APPENDIX A

TIMELINE OF ACTIVITIES AND MEETINGS

APPENDIX A

Timeline of Activities and Meetings

Date	Activity
November 6, 1995	Began regular meetings with Drs. Spooner and Harding (ES&D).*
November 9, 1995	Introduced myself and the project at the meeting of department heads.
November 13, 1995	ES&D discussed skills training and "colonies".*
November, 1995	Introduced the idea of academic leadership to Drs. Spooner and Harding.*
November 22, 1995	Introduced myself and the "action research" project to the CDET and invited their participation.*
November 28, 1995	Realized that Drs. Spooner and Harding were expecting me to take a leadership role in the conduct of the project.*
December 8, 1995	Second meeting with the CDET.*
January 10, 1996	Final Meeting with the CDET. Made a presentation on the idea for academic leadership at the College.*
February, 1996	Participated in TIPS 4.
	Learned that the CDET had temporarily suspended active operations.*
February 19, 1996	Drs. Spooner and Harding and I met with the Dean regarding academic leadership and needs assessment.* The Dean commented following the meeting on the need to have an evaluation of TIPS.
March 14, 1996	Presented the idea about academic leadership at a meeting of department heads.
April 4, 1999	Met with the program committee for the department heads retreat where the academic leadership program would be delivered.
April, 1996	Needs assessment questionnaires were distributed.
May 1, 1996	First evaluation of TIPS (2 and 3) was distributed and analyzed.
	Dr. Spooner discloses that he thinks of me as a colleague.*

May 10, 1996	Delivered the first day of the academic leadership workshop at the Willows Country Club..
June, 1996	Assisted Drs. Spooner and Harding with TIPS 5.
June 10, 1996	ES&D discussed additional remuneration for services.*
June 24, 1996	Delivered a repeat version of the first day of academic leadership to faculty and some department heads at Royal University Hospital.
August, 1996	Distributed registration flyer for fall term faculty development program.
	Conducted first round of interviews an Academic Leadership workshops.*
	Assisted with TIPS 6 (for residents only).
September 19 & 20, 1996	Delivered the second day of academic leadership to two different groups of faculty including the Dean, other senior administrators, department heads, and other full and part-time faculty.
November 1996	Distributed registration flyer for winter/spring term faculty development program.
	Conducted follow up round of interviews regarding Academic Leadership.*
	Dr. Spooner confirms my personal impact at the College.*
December 1996	Assisted with TIPS 7.
March 17, 1997	Drs. Spooner Harding and I met to discuss long term plans for ES&D in the light of the addition of one more full-time faculty position to the office.

Note
* Indicates that the interview or meeting data were taped.

APPENDIX B

TIPS RETROSPECTIVE SELF-EVALUATION QUESTIONNAIRE

Appendix B

TIPS Evaluation

It has been about four months since you participated in TIPS. We would like you to give us your impressions of how much the workshop experience has contributed to your development as a teacher. Our intention is to evaluate the effectiveness of the TIPS workshop, not your teaching.

This survey is one component of an action research project in the College of Medicine dealing with the adoption, implementation, facilitation and evaluation of faculty development programs. The data generated from this survey will be used to help make decisions about the adoption and implementation of specific programs for faculty development.

Non-completion of this survey or any part of it will not affect your employment status, annual assessment or good standing at the College. Reports and summaries based on the data collected will be made available to students and staff upon request. You will remain anonymous and the raw data will be kept confidential accessible only by you and the researchers. Voluntary completion of this survey will be taken as consent to use the data in the study. You may give your name **if you so choose** so that we can contact you regarding the collection of data about improvements to your teaching from other sources which may be correlated with this instrument. This should take about 15 minutes to complete.

Questions About Your Teaching

Each statement about teaching has two scales related to it, one for the present and one for the period before you attended TIPS. In making your judgments use the standard for teaching you now have. Therefore assess both BEFORE and PRESENT based on your PRESENT standards. Circle your choice.

For these first questions about teaching performance, the scale is based on perceptions of FREQUENCY from **N**EVER (0%) through **R**ARELY (16.3%), **OC**CASIONALLY (33.6%), **S**OMETIMES (50%), **U**SUALLY (66.6%), **OF**TEN (83.3%) to **A**LWAYS (100%).

BEFORE	STATEMENTS ABOUT TEACHING	PRESENT
N R Oc S U Of A /----/----/----/----/----/----/	I formulate objectives appropriate to my teaching situations.	N R Oc S U Of A /----/----/----/----/----/----/
N R Oc S U Of A /----/----/----/----/----/----/	I provide a motivational set when presenting.	N R Oc S U Of A /----/----/----/----/----/----/
N R Oc S U Of A /----/----/----/----/----/----/	My presentations are well planned and organized.	N R Oc S U Of A /----/----/----/----/----/----/
N R Oc S U Of A /----/----/----/----/----/----/	I apply effective presentation techniques.	N R Oc S U Of A /----/----/----/----/----/----/
N R Oc S U Of A /----/----/----/----/----/----/	I formulate questions which promote thinking in students.	N R Oc S U Of A /----/----/----/----/----/----/
N R Oc S U Of A /----/----/----/----/----/----/	I use teaching methods which help students become active participants.	N R Oc S U Of A /----/----/----/----/----/----/
N R Oc S U Of A /----/----/----/----/----/----/	I use an appropriate closure in my presentations.	N R Oc S U Of A /----/----/----/----/----/----/
N R Oc S U Of A /----/----/----/----/----/----/	I display enthusiasm when teaching.	N R Oc S U Of A /----/----/----/----/----/----/
N R Oc S U Of A /----/----/----/----/----/----/	I actively consider students and their learning when I teach.	N R Oc S U Of A /----/----/----/----/----/----/

For these next questions about your attitude towards teaching we have changed the scale to indicate the STRENGTH of your beliefs from STRONGLY AGREE (**SA**) through AGREE (**A**), DISAGREE (**D**) to STRONGLY DISAGREE (**SD**).

BEFORE	STATEMENTS EXPRESSING ATTITUDE	PRESENT
SA A D SD	I appreciate the complexity of teaching.	SA A D SD
SA A D SD	I believe in the importance of teaching at the College.	SA A D SD

Please provide us with information about other changes that you may have experienced as a direct or indirect result of your involvement in the TIPS workshop. You may also make any other

kinds of comments you wish.

_____

_____

_____

_____

_____

Name (optional) Department (optional)

Please indicate if you would be willing to release for this study other data about your teaching as listed below. (An indication of willingness now does not mean that we will seek out this information without formally asking for your permission.) We have provided some space for you to write in any comments or questions may you have at this time.

Teaching dossiers	YES	NO	I need more information
Observations of your department head or immediate supervisor	YES	NO	I need more information
Classroom observations by a trained observer	YES	NO	I need more information
Student Evaluations	YES	NO	I need more information

Thank you very much for answering this survey and indeed for participating in TIPS. Your involvement in this study is very much appreciated and valued.

You may contact the researchers or advisor at any time for any reason pertaining to this study.

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APPENDIX C

SUPPORTING QUANTITATIVE DATA

Appendix C-1

Participant Evaluation of selected components of TIPS

TIPS Component	October 1995 n=8	February 1996 n=16	June 1996 n=11	August 1996 n=11	December 1996 n=9	Mean
TIPS Faculty						
A	5.75	5.36	5.27	5.45	–	5.45
B	5.88	5.43	5.36	5.64	5.33	5.52
Team	5.81	5.31	5.06	5.45	5.22	5.37
Sessions						
Objectives	5.86	5.29	4.82	5.18	4.88	5.20
Organization of Instruction	5.75	5.29	5.27	5.27	5.22	5.36
Questioning	5.63	5.07	4.91	5.09	5.11	5.16
Evaluating Students	–	–	5.18	4.55	5.13	4.95

Notes The highest rating was "Excellent" at 6.

TIPS Faculty "A" was not involved in December 1996.

"Team" scores are the mean of individual scores of the TIPS faculty.

The session "Evaluating Students" was not included in October 1996 or February 1996.

Appendix C-2

Participant Evaluation of two general criteria of quality for TIPS workshops

TIPS Criteria	October 1995 n=8	February 1996 n=16	June 1996 n=11	August 1996 n=11	December 1996 n=9	Mean
Learned	4.75	4.64	4.64	4.64	5.00	4.73
Worthwhile	4.75	4.43	4.5	4.5	4.88	4.61

Notes The highest rating was "Strongly Agree" at 5.

"Learned" is short for the statement, "You felt that you learned".

"Worthwhile" is short for the statement, "The workshop was worthwhile."

Appendix C-3

Respondents to Needs Assessment by Department

	Department	Respondents	Total	Return Rate
Basic Science	Anatomy and Cell Biology	2	11	
	Biochemistry	5	11	
	Microbiology	7	12	
	Pharmacology	4	8	
	Physiology	6	10	
	Unidentified	4	4	
	Total	36	90	(40%)
Clinical	Anaesthesia	4	7	
	Family Medicine	2	12	
	Medicine	13	43	
	Obstetrics and Gynaecology	4	7	
	Pediatrics	7	18	
	Physical Therapy	4	6	
	Psychiatry	7	23	
	Surgery	7	21	
	Rehabilitation Medicine	1	4	
	Total	49	141	(35%)
Support	Community Health and Epidemiology	3	6	
	Medical Imaging	1	13	
	Pathology	4	15	
	Total	8	34	(21%)

Appendix C-4

Comparing the Workweek of Clinical and Basic Science Faculty

Workweek activities	Percentage of Workweek	
	Basic Science	Clinical
Teaching**	28.97	21.23
Research***	35.51	17.21
Service***	14.92	47.98
Administration*	19.31	12.31
Other	1.02	1.03
Total	99.73	99.76

Note

* $p<0.05$ ** $p<0.01$ *** $p<0.001$

Appendix C-5

Interest in Faculty Development Sessions

Proposed Faculty Development Sessions	Means Full-time	Part-time	Reg'n
Assessment techniques. (How to find out what students are learning.)	2.52	2.86 (5)	17
Problem-based Learning for classroom instruction	2.56	3.08 (9)	–
Active learning strategies for effective teaching and presentations.	2.60	2.49 (1)	14
Establishing rapport, enthusiasm, and motivation.	2.61	2.77 (3)	–
Evaluating student learning and courses.	2.72	3.02 (8)	–
Teaching in small groups (under 10): seminars and tutorials.	2.76	2.60 (2)	19
Teaching adults in higher education (most of your students) with consideration for their learning styles and needs.	2.76	2.98 (7)	–
Developing new courses or redesigning old ones.	2.91	3.33 (11)	–
Teaching to large groups (over 50).	2.92	3.51 (12)	–
Setting appropriate objectives.	3.05	2.81 (4)	–
Basic teaching principles and techniques .	3.31	2.88 (6)	14
An on-going study group that focuses on the teaching concerns of the instructors who participate.	3.35	3.29 (10)	3

Notes The highest level of interest was represented by a 1; the lowest level by a 5.

"Reg'n" is short for registration in the fall 1996 faculty development program.

The sessions are ranked in order from highest to lowest for full-time faculty.

Session ranks for part-time faculty are given in parentheses.

Appendix C-6

Student Recommendations for Teaching Development Sessions

Proposed Faculty Development Sessions	Mean Recommendation For Faculty	For Residents
Assessment techniques.** (How to find out what students are learning.	2.23	2.87 (4)
Developing new courses or redesigning old ones.***	2.30	3.21(8)
Active learning strategies for effective teaching and presentations.	2.46	2.67 (1)
Problem-based learning for classroom instruction.**	2.46	2.91 (5)
Evaluating student learning and courses.*	2.56	2.94 (6)
Establishing rapport, enthusiasm, and motivation.***	2.64	3.28 (9)
Teaching in small groups (under 10): seminars and tutorials.	2.76	3.06 (7)
Basic teaching principles and techniques.	2.82	2.87 (3)
Teaching adults in higher education with regard to their learning styles and needs (most students).*	2.87	3.43 (10)
Setting appropriate objectives.	2.91	2.72 (2)
Teaching to large groups (over 50)	3.44	3.65 (11)

Notes Recommendations for faculty are ranked from most highly recommended to least recommended. Ranking of recommendations for residents are indicated in parentheses.

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Appendix C-7

Attendance Information for Fall Term Faculty Development Program

Session	Registration	Attendance		Reach
		Full-time	Part-time	
Active Learning	14	9(2)	1	4.05%
Assessment Techniques	17	10(2)	1	4.54%
Small Group Instruction	19	9(4)	0	4.05%
TIPS	14	8(2)	0	27.27%
Instructional Study Groups	3	1(1)	0	0.45%
Total	67	30(7)	0	13.63%

Notes

Some faculty who attended were not with the College of Medicine, Saskatoon campus. Those participants are indicated in parentheses.

We did not compute the "Reach" for part-time faculty since the number of participants were so few compared to the over 600 part-time faculty in total; the percentages would be extremely small.

We included in the Reach of TIPS the total number of faculty that have taken TIPS, about 60 as of December 1996.

In the Total Attendance we counted each faculty member only once even if he or she attended several sessions but counted them multiple times for the total registration.

Appendix C-8

Evaluating Half-Day Workshops:Participant Agreement With Statements of Quality

Criteria	Active Learning	Assessment Techniques	Small Groups	Mean
Objectives were clear	4.80	4.00	4.40	4.40
The level of content was appropriate	4.36	4.31	4.10	4.25
Instructional materials contributed to your learning	4.64	4.43	3.78	4.28
Sessions were well prepared	4.73	4.57	4.10	4.46
Sessions motivated you to learn	4.64	4.36	4.70	4.56
You felt that you learned	4.55	4.07	4.20	4.27
The workshop was worthwhile	4.70	4.07	4.20	4.32

Notes "Strongly Agree" was given a value of 5. "Strongly Disagree" was given a value of 1.

Appendix C-9

Evaluating Half-Day Workshop: Participant Ratings of Selected Objectives

Objectives	Active Learning	Assessment Techniques	Small Groups	Mean
Identify appropriate strategies	4.73	4.53	4.70	4.66
Plan to use new ideas	5.30	4.79	4.70	4.93
Build a Network of Peers	4.00	4.29	3.90	4.06

Notes A value of 6 indicated "Excellent," the top rating.

Appendix C-10

Participant Satisfaction with Academic Leadership Workshops

Statement of Quality	Day 1	Day 2	Combined
The level of content was appropriate.	4.78	5.12	4.93
This workshop is worthy of leaders at the College.	4.78	5.08	4.91
There were useful, relevant, and practical ideas generated during the day.*	4.78	5.40	5.05
There was an appropriate level of motivation.	4.90	5.20	5.04
The readings contributed to an understanding of issues in medical education.	5.03	5.13	5.07
The sessions were well prepared.	5.20	5.16	5.18

Notes The highest possible rating was "Strongly Agree" set at a value of 6.

"Combined" represents the rating for both days taken together.

* $p < 0.001$

Appendix C-11

Impediments to Effective Teaching

Description of Possible Impediments	Means Full Time	Means Part Time
1. Teaching is given scant consideration in promotion, tenure, and merit pay decisions (compared to research).	1.98	1.93 (1)
2. Dossiers are extra work with limited support or reward.	1.98	2.05 (3)
3. I would like to improve my teaching but I have trouble finding the time for such an effort.	2.07	1.98 (2)
4. There is a financial **disincentive** in teaching.	2.20	2.08 (4)
5. The present system of students evaluating instructors is **not** a valid or reliable way to improve teaching.	2.46	2.54 (5)
6. The vast amount of material that I need to cover prevents me from trying an approach to teaching different from the traditional lecture.	2.71	2.70 (6)
7. There is strong pressure to prepare the students for their exams so I usually emphasize remembering facts rather than learning other kinds of skills.	3.00	2.98 (8)
8. In my lectures to undergraduates I like to demonstrate my expertise in the area rather than limit the material to what the students really need to know.	3.20	2.91(7)

Notes The level of agreement was represented by a 1 for "Strongly Agree" through to a 4 for "Strongly Disagree."

The impediments are ranked in order from highest to lowest level of agreement by full-time faculty.

The ranks by part-time faculty are given in parentheses.

Appendix C-12

Motivators for Teaching

Items related to motivating factors	Means Full Time	Part Time
1. Teaching graduate students and/or residents is intellectually stimulating.	1.43	1.24 (1)
2. Teaching is rewarding because it provides an opportunity to influence the next generation of physicians and scientists and thus contribute to society.	1.62	1.39 (2)
3. There is enjoyment in contributing to and witnessing student learning.	1.63	1.54 (3)
4. Teaching undergraduate courses is rewarding because it helps the teacher to learn the material to a higher degree.	2.00	1.94 (4)
5. Recognition of good teaching from other faculty helps make it seem more worthwhile.	2.08	2.04 (7)
6. Being recognized as an authority in the field and asked to teach is an incentive to teach well.	2.20	2.00 (5)
7. There is an expressed expectation by the College administration that teaching be of a high quality.	2.23	2.10 (8)
8. There is an expectation among professors at the College that teaching be done well.	2.32	2.02 (6)
9. College awards for teaching are an incentive to teach well.	2.69	2.68 (9)

Notes The level of agreement was represented by a 1 for "Strongly Agree" through to a 4 for "Strongly Disagree."

The motivators are ranked in order from highest to lowest level of agreement for full-time faculty.

The ranks by part-time faculty are given in parentheses.

Appendix C-13

Comparing Interests in Faculty Development Sessions by Years of Employment

Faculty Development Session	Means of Each Group	
	>10 years	<10 Years
Active Learning**	2.90	2.24
Evaluating Student Learning and Courses*	2.92	2.48
Assessing Student Learning**	2.77	2.21
Teaching Adults*	3.00	2.47
TIPS*	3.47	3.12

Notes Sessions with high interest received a mark of 1; a value of 5 was the lowest.

* $p < 0.20$ ** $p < 0.05$

Appendix C-14

Comparing Perceptions of Forces Bearing on Effective Teaching by Years of Employment

Forces Bearing on Effective Teaching	Employment Status >10 years	<10 Years
Teaching graduate students and/or residents is intellectually stimulating.	1.47	1.39
Teaching undergraduate courses is rewarding because it helps the teacher to learn the material to a higher degree.	2.90	2.09
There is an expressed expectation by the College administration that teaching be of a high quality.	2.04	2.46
There is an expectation among professors at the College that teaching be done well.*	2.02	2.68
College awards for teaching are an incentive to teach well.	2.73	2.64
Teaching is given scant consideration in promotion, tenure, and merit pay decisions (compared to research).*	2.15	1.78
Dossiers are extra work with limited support or reward.	1.98	1.98
I would like to improve my teaching but I have trouble finding the time for such an effort.*	2.23	1.87

Notes The level of agreement was represented by a 1 for "Strongly Agree" through to a 4 for "Strongly Disagree."

* $p < 0.05$

APPENDIX D

NEEDS ASSESSMENT QUESTIONNAIRE

Appendix D

Enhancing Instructional Effectiveness in the College of Medicine

Needs Assessment Survey On Faculty Development 1996

Faculty Questionnaire

(Full Time)

The College of Medicine is conducting a detailed survey to determine the needs of faculty in carrying out their teaching responsibilities. Specific questionnaires are being distributed to faculty members, residents, and students. Results of the survey will help to identify key needs in "faculty development" and the forces which influence teaching effectiveness. This survey is part of a research project examining the selection, implementation, facilitation, and evaluation of "faculty development" programs.

Questionnaires will be treated with anonymity and confidentiality. Identifiers are not being used; please do **not** place your name anywhere on this form. Returning the completed form is voluntary and will be construed as permission to use the data in the study. If you choose not to complete the questionnaire your employment status, annual assessment, or good standing at the College will not be compromised. Reports and summaries of results will be made available to faculty, residents, and students upon request.

This questionnaire should take about 20 minutes to complete.

You may contact the researcher or advisor for any reason pertaining to this study.

Marcel D'Eon
Educational Administration
Administration (advisor)
966-7017

Kevin Wilson, PhD
Head, Educational

966-7619

Jim Spooner, PhD
Educational Support and Development
Development
College of Medicine
966-6138

Sheila Rutledge Harding, MD
Educational Support and

College of Medicine
966-6946

Please return to
Dr. J. Spooner, Educational Support and Development, College of Medicine
by
April 30, 1996.

Thank you in advance for your attention to this survey.

Demographic Data: Faculty (Full Time)

1. I am a full-time faculty member in the Department of _____ _____.

2. How long have you been employed at the College of Medicine?
   - ◘ 1 day - 2 full years
   - ◘ 2 years plus a day - 5 full years
   - ◘ 5 years plus a day - 10 full years
   - ◘ more than 10 years

3. How long were you employed at a different College or post-secondary institution?
   - ◘ Never
   - ◘ 1 day - 3 full years
   - ◘ 3 years plus a day - 10 full years
   - ◘ more than 10 years

4. Please estimate the percentage of time you devote to each of the following professional activities this year as part of your contract with the College of Medicine.

teaching	(____%)
research	(____%)
service/practice	(____%)
administration	(____%)
other	(____%)
TOTAL	100%

5. I have participated in the TIPS (Teaching Improvement Project Systems) workshop.
   - ◘ Yes
   - ◘ No

6. Over the course of your career, in how many instructional development workshops sponsored by the University have you participated?
   - ◘ Zero
   - ◘ 1 -4
   - ◘ 5-10
   - ◘ 11 or more

7. How many years of formal teacher training have you taken?
   - ◘ None
   - ◘ 1 day - 2 full years
   - ◘ 2 years plus a day - 4 full years
   - ◘ more that 4 full years

8. I have the following degree(s) in **education**.
   - ◻ None
   - ◻ BEd
   - ◻ MEd
   - ◻ PhD

9. I have had informal training and experience in teaching: (please describe) _____
   _____

Your Needs for Development of Teaching Skills: *Faculty*

Directions: Please indicate your level of interest in participating in any of the following activities or faculty development opportunities by **circling** the appropriate descriptor.

DI - Definitely Interested	(I would register today for such a workshop.)
VI - Very Interested	(I would probably register.)
I - Interested	(I might or might not register.)
SI - Somewhat Interested	(I would **probably not** register.)
UI - UnInterested	(I would definitely **not** register.)
? - more information needed	(This can be used in addition to any of the other descriptors)

10.	Setting appropriate objectives.	**DI VI I SI UI ?**
11.	Active learning strategies for effective teaching and presentations.	**DI VI I SI UI ?**
12.	Evaluating student learning and courses.	**DI VI I SI UI ?**
13.	Assessment techniques. (How to find out what students are learning.)	**DI VI I SI UI ?**
14.	Teaching adults in higher education (most of your students) with consideration for their learning styles and needs.	**DI VI I SI UI ?**
15.	Problem-based learning for classroom instruction.	**DI VI I SI UI ?**
16.	Teaching in small groups (under 10): seminars and tutorials.	**DI VI I SI UI ?**
17.	Teaching to large groups (over 50).	**DI VI I SI UI ?**
18.	Establishing rapport, enthusiasm, and motivation.	**DI VI I SI UI ?**
19.	An on-going study group that focuses on the teaching concerns of the instructors who participate.	**DI VI I SI UI ?**
20.	Basic teaching principles and techniques (ie.**TIPS**).	**DI VI I SI UI ?**
21.	Developing new courses or redesigning old ones.	**DI VI I SI UI ?**
22.	Supporting and encouraging teaching excellence among faculty (ie. **Academic Leadership**).	**DI VI I SI UI ?**

Comments and Suggestions

_____

_____

_____

_____

Forces Which Facilitate or Impede Effective Teaching: Faculty

Circle the letter descriptors which most closely match your **opinion** on the statement given.
SA -Strongly Agree; **A** - Agree; **D** - Disagree; **SD** - Strongly Disagree

23.	Teaching is given scant consideration in promotion, tenure, and merit pay decisions (compared to research).	S A A D S D
24.	Dossiers are extra work with limited support or reward.	S A A D S D
25.	Teaching graduate students and/or residents is intellectually stimulating.	S A A D S D
26.	Teaching undergraduate courses is rewarding because it helps the teacher to learn the material to a higher degree.	S A A D S D
27.	Teaching is rewarding because it provides an opportunity to influence the next generation of physicians and scientists and thus contribute to society.	S A A D S D
28.	College awards for teaching are an incentive to teach well.	S A A D S D
29.	Being recognized as an authority in the field and asked to teach is an incentive to teach well.	S A A D S D
30.	There is enjoyment in contributing to and witnessing student learning.	S A A D S D
31.	There is a financial disincentive in teaching.	S A A D S D
32.	There is an expectation among professors at the College that teaching be done well.	S A A D S D
33.	There is an expressed expectation by the College administration that teaching be of a high quality.	S A A D S D
34.	The present system of students evaluating instructors is not a valid or reliable way to improve teaching.	S A A D S D
35.	I would like to improve my teaching but I have trouble finding the time for such an effort.	S A A D S D
36.	The vast amount of material that I need to cover prevents me from trying an approach to teaching different from the traditional lecture.	S A A D S D

37. There is strong pressure to prepare the students for their exams so I usually emphasize remembering facts rather than learning other kinds of skills. S A A D S D

38. In my lectures to undergraduates I like to demonstrate my expertise in the area rather than limit the material to what the students really need to know. S A A D S D

39. Recognition of good teaching from other faculty helps make it seem more worthwhile. S A A D S D

Comments

_____

_____

_____

_____

_____

This concludes the questionnaire. Thank You!

APPENDIX E

FACULTY DEVELOPMENT PROGRAM FLYER

Appendix E
Faculty Development Program Flyer

University of Saskatchewan
College of Medicine

FACULTY DEVELOPMENT

in support of

EFFECTIVE TEACHING AND LEARNING

Fall Term Program

September-December 1996

Sponsored by:

Educational Support and Development
H.James Spooner, PhD, Director
Sheila Rutledge Harding, MD FRCP(C), Assistant Director
Marcel D'Eon, MEd, Doctoral Fellow

PROGRAM FEATURES:

Half Day Sessions address topics of high interest and concern to faculty and each one features a guided discussion on building rapport, generating enthusiasm and motivating students. An 'overview' of teaching and learning is a prerequisite.

An 'Overview' of Teaching and Learning provides for an organized understanding of teaching and learning, principles of adult learning; and knowledge needed for effective teaching. This short session will be offered before each Half Day session and is a prerequisite for them. Each TIPS workshop includes such an overview.

TIPS is an intensive three day workshop on many essential elements of effective teaching. TIPS workshops include two valuable video taped 'micro teach' sessions.

TIPS Sequels are for 'TIPS' grads only. Micro Teach/Debriefs, and Instructional Study Groups will expand and consolidate improved teaching practices acquired through the TIPS experience.

Problem-Based Learning workshops are being planned. Information will be released when available.

(This program has been developed in response to the College of Medicine Needs Assessment conducted in the spring of 1996)

REGISTRATION INFORMATION:

You may register by completing the form included with this information package and sending it to Dr. H. James Spooner, Educational Support and Development, Room B103, College of Medicine, or by calling Sherry at extension 6151. Please register at least one week before the session(s) you would like to attend. There is no registration fee for College of Medicine personnel.

Active Learning Strategies for Effective Teaching

Effective teaching engages the learner in an active process of assimilating new ideas, information, and concepts. This session will model and explain active learning strategies such as problem-solving, concept attainment and use of advance organizers suitable for any teaching situation.

Objectives:

- To identify appropriate active learning strategies.
- To make plans for the use of one or more of these active learning strategies.
- To build a supportive network of peers who are interested in improving their teaching.

Saturday, September 14, 1996 10:00-12:00 RUH Conference Room A-6th Floor Old Hospital ☐

Tuesday, September 17, 1996 2:30-4:30 Room A101 Health Sciences Building (Nursing Conference Room) ☐

Assessment Techniques for Lectures and Courses

Knowledge of the learner is an essential component of effective teaching. This includes an accurate assessment of what students are learning and how well they are learning what teachers want them to learn. Assessment results provide information to instructors who can then make adjustments to their teaching in order to meet the needs of learners. A number of practical and easily implemented assessment techniques, including the use of questions, will be highlighted.

Objectives:

- To identify appropriate assessment techniques.
- To make plans to use one or more of these assessment techniques.
- To build a supportive network of peers who are interested in improving their teaching.

Tuesday, October 8, 1996 2:30-4:30 Room A101 Health Sciences Building (Nursing Conference Room) ☐

Saturday, October 19, 1996 10:00-12:00 RUH Conference Room A-6th Floor Old Hospital ☐

Teaching in Small Groups

The basic principles of teaching and learning apply to situations of small seminar groups, bedside teaching, and one-on-one instruction. This session will teach and model strategies suitable for small group instruction.

Objectives:

- To identify appropriate strategies for small group learning situations.
- To make plans to use one or more of these strategies.
- To build a supportive network of peers who are interested in improving their teaching.

Saturday, November 16, 1996 10:00-12:00 RUH Conference Room A-6th Floor Old Hospital ☐

Tuesday November 19, 1996 2:30-4:30 Room B503 Health Sciences Building (Nursing Conference Room) ☐

TIPS

TIPS is an intensive three day workshop which includes presentations, discussions and individual work. The objectives are achieved through experience in defining objectives, planning lectures, seminars and demonstrations, preparing instructional materials, practicing teaching skills, and evaluating student learning. You will prepare and present two ten-minute teaching sessions ("micro teaches") from your own repertoire. Each of these is videotaped for private viewing and evaluation followed by discussion with a facilitator.

Sunday afternoon December 15, 1996 - Tuesday, December 17, 1996 ☐

TIPS SEQUELS

Micro Teach/Debrief A

This is a half-day opportunity for TIPS grads to learn and experiment with effective teaching practices. You will present a 5 - 10 minute micro teach, followed by group debriefing and general discussion. A video camera will be available to tape your micro teach for your personal use, if you so choose. (BYOT - bring you own tape, please.)

Friday, November 1, 1996 2:00-5:00 RUH Room 4003 ☐

Instructional Study Group

Instructional Study Group (ISG) will provide you with the opportunity to discuss the teaching/learning process with colleagues, to share personal experiences and relevant literature, and to engage in problem solving and trouble-shooting.

Friday, October 4, 1996 4:00-5:30 RUH Conference Room A-6th Floor Old Hospital ☐

Friday, December 6, 1996 4:00-5:30 RUH Conference Room A-6th Floor Old Hospital ☐

APPENDIX F

ETHICS

APPENDIX F
Application for Ethics Approval

University of Saskatchewan Advisory Committee on Ethics in Human Experimentation

Behavioural Sciences Committee

Application for Approval of Research Protocol

ORS USE ONLY
File Number _____
Date Received _____

1. Research Supervisor: **Dr. Kevin Wilson**
Educational Administration

1a. Student Associate: **Marcel D'Eon (Student # 811816)**

1b. Program **Ph. D. in Educational Administration**

2. Title of Study: **Enhancing Instructional Effectiveness in a College of Medicine**

3. Abstract:

This is an action research project (Lewin, 1952; Kolb, 1984) of at least two years duration in the College of Medicine of the University of Saskatchewan dealing with the selection, facilitation and evaluation of high quality faculty development programs aimed at improving student learning. Marcel D'Eon will be one of a three member project team which will include the Director and Associate Director of Educational Support and Development in the College of Medicine. The leadership team or 'steering committee' function will be met by the Committee for the Development of Effective Teaching. Both the faculty development programs adopted by the Committee and the practice of providing leadership for the enhancement of instructional effectiveness will be the subjects of Marcel D'Eon's research undertaking.

4. Funding:

This study is being funded in part through a doctoral fellowship sponsored by the Academic Enhancement Committee of the College of Medicine.

5. Subjects: **The Project Team**
Instructors of medical students
Committee for The Development of Effective Teaching
Selected administrators including Heads of Departments
Medical students

6. Methods/Procedures: **Various**
Consistent with an action research approach, we intend to use a variety of data collection

methods which will include semi-structured interviews, surveys, recorded meetings, classroom observations (in personal or electronic), individual journal reflections and surveys.

7. Risk:

There is no deception involved whatsoever. All participation in the interviews, recorded meetings, classroom observations, surveys and other data collection methods will be completely voluntary with full disclosure of purpose and format of the study. The risks associated with the selection and implementation of programs for instructional development derive from the investment of time and energy by participants in these sessions with no guarantee of success.

8. Confidentiality:

Risks due to loss of confidentiality will be minimized through controlled access to the data and anonymous surveys.

9. Consent Forms: Attached

Surveys will be prefaced with a brief statement of the purpose of the study and the ethical guidelines that will guard anonymity and confidentiality. Completion of the survey will be regarded as consent to use the data in the study.

10. Debriefing:

The reports generated from this study will be made available to the participants. Intermittent reports on the progress of the study will be prepared for the Dean of the College of Medicine. Information on the project will be regularly communicated to College personnel. All participants, the leadership team in particular, will have an opportunity to respond both to drafts of the reports and to summaries of data collected.

Signature of Supervisor

Signature of Student

Signature of Department Head

APPENDIX F
Consent Form

Enhancing Instructional Effectiveness in a College of Medicine

Marcel D'Eon
Doctoral Student, University of Saskatchewan
Advisor:
Dr. Kevin Wilson, University of Saskatchewan

Consent to Participate in an Interview

1. The purpose of the study is to conduct a systematic inquiry into the selection and implementation of faculty development initiatives in the College of Medicine. Both the faculty development programs implemented by the College and the practice of providing leadership in developing instructional effectiveness will be the subjects of our research undertaking. The two research questions are:

    a. Which specific faculty development opportunities are appropriate in the College?, and
    b. How does a successful program to enhance instructional effectiveness become initiated and implemented?

2. My participation in this interview is voluntary and I understand that I am free to withdraw at any time I choose without prejudice to my employment or student status, annual assessment or good standing in the College.

3. I understand that I will have an opportunity to review the summaries and interpretations of data collected from me in order to check and enhance the accuracy thereof. Changes to data I own will be made on my request.

4. I understand that pseudonyms may be used in written reports and summaries to guard the confidentiality of the participants.

5. I understand that the information collected during this study will be used for the stated research purposes only; the confidentiality of the data with respect to other purposes will be strictly maintained.

6. I understand that only the researcher, his advisors, and the pertinent participants will have access to the data on tape recordings, transcripts, and observational field notes generated from this study. All data will be kept in a secure place by the researcher and access controlled by him. Summaries of notes and interviews will be made available to the project and leadership teams after participant checks. "Pertinent participant" means that individuals may have access upon request to the data they have personally provided, but not to data provided by other individuals, unless those other individuals were present at the time the requested data was generated.

As a participant in an interview for this study, I acknowledge that I have been fully informed of these guidelines and that I have agreed voluntarily to participate under these conditions.

Participant: _____

Researcher: _____

Witness: _____

Date: _____

You may contact the researcher or advisor at any time for any reason pertaining to this study.

Marcel D'Eon
Educational Administration
966-7017

Kevin Wilson, PhD
Head, Educational Administration
966-7619