

TUTORS TRAINING WORKSHOP REPORT (1989)

UNIVERSITY OF NEW MEXICO

U.S.A.

TUTOR TRAINING WORKSHOP

November, 1989

GOALS OF THE PRIMARY CARE CURRICULUM

The Primary Care Curriculum provides an opportunity for students to obtain a medical education experience which emphasizes the skills necessary for lifelong learning. The science basic to medicine is learned in the context of medical problems through the use of the scientific method (clinical reasoning process). The goals of the Primary Care Curriculum include a wide range of activities.

1. SCIENTIFIC REASONING

The student will be able to approach clinical problems with appropriate scientific reasoning (identifying and prioritizing problems, generating and testing broad hypotheses), integrating information from the basic and clinical science disciplines. The student will be able to function effectively in an environment of ambiguity and uncertainty.

Assessment: Individual Process Assessment, tutorial group, preceptorship, ward performance

2. SCIENTIFIC CONTENT

The student will attain a working knowledge of the basic and clinical sciences and be able to describe pertinent abnormal physical or behavioral process(es) and their interrelationships in all the patient's identified problems. The student should be able to describe these events in appropriate pathophysiological, psychological or sociological terms, listing the facts that support the process(es) identified. If the student feels that several possibilities exist on the basis of the data available, they should be listed in order of importance (likelihood, urgency, etc.).

Assessment: Individual Process Assessment, tutorial group, preceptorship, ward performance

3. RESEARCH ASSESSMENT SKILLS

When studying a medically-related report (journal, monograph, paper, presentation, abstract, poster, etc.), the student will be able to critically assess the questions being posed and their significance; the appropriateness and limitations of the methods being used; the consistencies and significance of the data and data differences; whether the conclusions are consistent with the data; the remaining unanswered questions; and the relevance of the information to current problems.

Assessment: Tutorial group

4. RESOURCE UTILIZATION

When faced with medical problems requiring further expertise for proper diagnosis or management, the student will be able to identify and efficiently utilize an appropriate quantity and quality of resources including texts, journal articles, library and community resources and

faculty.

Assessment: Individual Process Assessment, tutorial group, preceptorship, ward performance

5. LIFELONG LEARNING

Students will continue to demonstrate a high level of motivation in the pursuit of the sciences basic to medicine. They will demonstrate the ability to utilize the clinical experience with patients as a stimulus for self-directed study.

Assessment: Tutorial group, preceptorship, ward performance

6. COLLECTION AND PRESENTATION OF DATA

The student will be able to collect adequate data from the patient using the appropriate range of interview and examination skills. The student should then be able to organize the information into a concise, problem-oriented written document and succinctly present the problem and its analysis orally.

Assessment: Individual Process Assessment, preceptorship and ward performance.

7. INTERPERSONAL SKILLS

The student will demonstrate interpersonal skills and cultural awareness necessary to facilitate patient communication, patient understanding of problem(s) and proposed management, and patient comfort. The student should be able to demonstrate insightful and constructive self- and peer-criticism. The student should be able to build a team relationship with other students and health professionals, appropriately identifying and utilizing their input in problem assessment and management; and help other students and health professionals learn to accept and provide constructive criticism with other students and health professionals.

Assessment: Individual Process Assessment, tutorial group, preceptorship, ward performance

8. COMMUNITY AND FAMILY HEALTH

The student will be able to demonstrate an ability to describe the impact of the health problem on the patient, the patient's family and the community. The student will be able to identify family relationships and factors in the community and environment which might have positively or negatively influenced the identified health problems.

The student will be able to assess the interaction between the patient and the community in terms of health prevention and maintenance.

Assessment: Tutorial group, preceptorship and ward performance

9. COST CONTAINMENT

The student will be able to indicate the cost of proposed treatment and management and demonstrate an understanding of the mechanisms whereby patients are able to pay for health care services.

Assessment: Tutorial group, preceptorship and ward performance

In the Primary Care Curriculum, all skill areas are introduced concurrently and are gradually developed and evaluated from the beginning of medical school. Thus, skills build in complexity as students gain facility in integrating them in the context in which they are used. This is a vital component of problem-based medical education. Further, the student will be exposed to a breadth of career opportunities and practice settings, from urban tertiary care to rural primary care, to permit the student to make more realistic decisions about future residency selections and practice options.

GROUP PHASE DEVELOPMENT

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ORIENTATION

Interaction during the orientation phase is aimed at trying to decide whether to be in the group or not. Some questions which members need answered include: Do I fit in? Do I want to be in this group? Am I going to be ignored? What behaviors are allowed in this group? During this phase two "types" emerge who may begin to engage in conflict: dependent (rely upon a strong leader) and independent (reject leadership) members.

The tutor's role during this phase may include: making sure the rules and regulations are clear (whether generated by the group or the tutor), and not abdicating the position of leader/facilitator/tutor. A supportive climate needs to be built from the beginning.

CONFLICT

By the end of the first phase group members may feel "swallowed up" by the group, given all the polite orientation which took place. Individuality gets asserted, and this is best accomplished through conflict. Conflict usually centers on at least two areas: how close and personal members should be; and who/what should the leader/leadership be. Power is the issue. The first area of conflict is promoted by the overpersonals (who desire unconditional love) and the underpersonals (who reject any affection in the group). The second area of conflict is promoted by those who believe the leader/tutor is god (or God or maybe even GOD), and those who believe he/she is a fool (or Fool, or maybe even FOOL). Moderates, those who belong to neither group, hold the group together and eventually work out a peace.

The tutor's role during this phase is, first of all, to stay out of the fighting--avoid taking sides (it is easy to reinforce the "leader is god" group and overlook the concerns of the other subgroup). The aim is to reduce hostility by keeping lines of communication open, by promoting discussion of the sore areas, and by establishing (continuing to establish) a supportive, confirming climate.

BALANCE/HIGH WORK

Personal identity versus a group identity is balanced; leader-as-god versus leader-as-fool is balanced; close versus far is balanced; task versus social (appears) is balanced. The balance may be tipped at any moment, but until it happens the group is in high gear, producing a tremendous amount of good work.

The tutor's task during this phase is no less central than during the other phases. A usual problem at this point is for the tutor to sit back and allow self-satisfied grin to appear on his/her face. The tutor needs to stay alert

(cont)

to the balance and move to recover it should it be disrupted. Also, during this phase the group will have a tendency to ignore the socio-emotional needs of the members. The tutor needs to introduce discussion to care for these needs, e.g. "rap sessions" unrelated to the specific task of the tutorial.

PARTING/DISINTEGRATION

Disintegration of educational groups is rather obvious since a time limit is usually imposed on the length of interaction. The first sign of disintegration is talk which is highly affectionate. The second sign is talk about control factors in the group, e.g., who did what and how well. And the third sign is talk related to inclusion in the group, e.g., statements of goodbye, talk about other groups to come, and work to be accomplished after the group. Two subgroups often emerge during this phase (without necessarily conflicting with each other): those who uninvest/divest themselves of the group by making disparaging remarks, and those who react to their feeling about the group ending by denying that the group need to disband at all.

The tutor's role during this phase is to, first, understand his/her own feelings about the group ending and, second, empathize but avoid taking sides with either subgroup.

Taken from: Small Group Communications

Lawrence Rosenfeld, Ph.D.

Dept. of Speech Communications - UNM

GUIDE TO QUALITY TUTORIALS

Evaluation of Knowledge: Depth and Breadth

— Deals with specific details without losing the big picture (overview).

Example:

— Promotes understanding of learning issues on at least two levels of knowledge, e.g. tissue and cell; normal and pathological; adult and child, etc.

Example:

— Asks for complete explanation of basic mechanisms.

Example:

— Requires use of the blackboard to illustrate and diagram concepts and relationships.

Example:

— Models critical appraisal of data.

Example: Tutor describes or requires description of methods and limits of data cited from student (journal articles, statistics).

— Requires correlation of learning issues with patient's problem.

Example: Discussion of mechanism of plaque formation in atherosclerosis related to shortness of breath in coronary care.

— Probes understanding of rate limiting/key steps in basic science mechanisms.

Example:

— Challenges students to think about what has been learned by using the "What if..." paradigm (changing data and situations).

Example:

— Asks for clarification of concepts, terms, diagrams.

Example:

Knowledge: Depth and Breadth (continued)

_____ Requires focused and specific learning issues.

Example:

_____ Is sensitive to psychosocial issues in cases, patients and tutorials.

Example:

Tutorial Evaluation

_____ Models honest, constructive feedback to individuals and group at the end of each tutorial.

Example:

_____ Models self evaluation.

Example:

_____ Uses learning prescriptions to facilitate setting of unit goals and to evaluate knowledge, skills, attitudes and behaviors.

Example:

_____ Conducts mid and end-unit evaluations efficiently and thoroughly.

Example:

_____ Helps students recognize their own biases and values.

Example:

_____ Guides students to plan what they can do better next time.

Example: Too many learning issues; students study differently or present without notes.

_____ Leaves adequate time for evaluation at the end of tutorials.

Example:

_____ Deals with problems when they occur.

Example:

Tutorial Evaluation (continued)

— Models criticism of behaviors rather than personalities.

Example: "I don't like it when you interrupt me...!"
versus "You're too aggressive."

— Helps group to use specific examples when providing constructive feedback.

Example:

— Factors cultural differences into evaluation and feedback.

Example:

Presentation Skills

— Provides feedback on presentation of information.

Example:

— Stresses organization, clarity and precision of presentations.

Example: Complete but overwhelming patient presentation.

— Challenges students to listen and evaluate peer's presentations critically.

Example:

— Sets high standards.

— Demonstrates and models teaching and presentation methods.

Example:

— Corrects pronunciation and specific use of technical language.

Example:

Evaluation of Teaching Skills:

— Asks open, probing questions, not the "guess what I'm thinking" type.

Example: Name two kinds of _____ if the liver were, ...

— Maintains continuity and focus of discussion by asking for periodic summaries.

Example:

— Reflects questions back to the group.

Example:

— Establishes a positive learning climate.

Example:

— Treats students with respect.

Example:

— Helps to identify and arrange specific resource sessions with faculty, visits to clinics, etc.

Example:

— Serves as a resource person when asked.

Example:

Evaluation of Group Process:

— Promotes active listening.

Example:

— Insists that one person speaks at a time.

Example:

— Helps each person to take a turn as group leader and facilitator.

Example:

— Intolerant of uneducated guessing and intellectual "apple bobbing."

Group Process (continued):

Helps to establish clear ground rules for group at beginning of unit.

Example:

Facilitates renegotiation of ground rules when necessary.

Example:

Creates open environment for discussion.

Example:

Facilitates resolution of interpersonal conflicts.

Example:

Helps group to "own" their tutorial and assume responsibility for their collective and individual learning.

Example:

Promotes efficient use of time.

Example:

Keeps group on track.

Example:

Is flexible and supportive of group.

Example:

Recognizes own limitations.

Example: Says "I don't know" and models this behavior.

Actively involves learners in group process.

Example:

Uses "I" messages.

Example:

Is aware of and uses body language to communicate.

Example:

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Group Process (continued):

_____ Helps group resolve conflicts using "win-win" methods.

Example: Works with group to find shared goal.

_____ Makes his/her expectations clear to group.

Example:

_____ Clarifies students' expectations of group and of tutor.

Example:

_____ Helps group to establish and stick to an agenda.

Example:

STUDENT EVALUATION OF THE TUTOR

M School of Medicine
Primary Care Curriculum

STUDENT _____

TUTOR _____

Mid-Unit _____

DATE _____

End-Unit _____

This evaluation of tutors is used by the program to determine tutor strengths and weaknesses, and is used as tutor training and enhancement. In addition, a composite evaluation is sent to the tutor's department chairman and entered into the faculty file.

Please bring this completed form to mid- and end-unit evaluations. Comment on each category using specific examples whenever possible.

KNOWLEDGE BASE - CONTENT LEARNING

Probes understanding of material to full extent. Challenges application to other situations. Requires students to relate learning issues to patient's problem.

PROBLEM BASED LEARNING PROCESS

Encourages problem identification and hypothesis generation. Facilitates reranking of hypotheses for purposes of closure. Encourages multi-system approach to patient problems (e.g. VINDICATE). Helps students identify focused learning issues.

STUDENT CENTERED LEARNING

Respects students as peer group learners. Active participant in group discussions. Maintains a non-authoritarian role. Each student is given the opportunity to lead a case discussion. Encourages student-to-student interactions.

GROUP SKILLS

Helps resolve group conflict. Models honest feedback. Models critical listening. Encourages effective presentation of material by each student. Helps group to "own" their tutorial and assume responsibility for their collective and individual learning.

USE OF UNIT RESOURCES

Helps to identify and arrange specific resource sessions with faculty, visits to clinics, etc. Serves as a resource person and encourages group to seek outside experts when appropriate. Familiar with cases and case exhibits and materials.

STUDENT EVALUATIONS

Uses learning prescriptions to facilitate setting of unit goals and to evaluate knowledge, skills, attitudes and behavior. Models honest, constructive feedback to individuals and group at the end of each tutorial. Regularly informs students of progress/problems. Facilitates follow-up and re-evaluation.

RECOMMENDATIONS

In which area of tutoring does this tutor demonstrate exceptional abilities?

What one area or attribute could this tutor modify in order to more effectively facilitate the tutorial process?

THE FUNCTIONS OF TUTORIAL GROUPS

The fundamental goal of the tutorial is to enable each student to develop a system of problem-based learning in order to acquire and utilize the science basic to medicine and other attributes necessary to become an effective physician and to sustain lifelong learning.

OUTLINE

- I. Use problem-based learning in the group to:
 - A. actively discuss and develop an approach to case problem(s) using the reasoning process;
 - B. identify appropriate learning issues and resources for information;
 - C. summarize, discuss and integrate back into the problem information obtained from individual learning.
- II. Use the group to develop effective communication skills with respect to:
 - A. transmission of information;
 - B. interpersonal interactions.
- III. In the group, assess the performance of the group, peers and self with regard to:
 - A. learning of basic and clinical science information;
 - B. use of reasoning process;
 - C. identification of appropriate informational resources;
 - D. use of communication and evaluation skills.
- IV. Use the group for support for:
 - A. emotional needs;
 - B. social interactions;
 - C. personal growth.

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THE FUNCTIONS OF TUTORIAL GROUPS

Introduction

As is stated on the cover page of this document, the primary goal of the tutorial is to help each student to develop a system of problem-based learning so that he or she can learn the science basic to medicine as well as other areas of knowledge which will make it possible to be an effective physician who will continue to learn throughout his/her career.

It should be stressed that although PCC utilizes tutorial groups, the learning, as in any other program, is essentially an individual process and each person is responsible for acquisition of knowledge. In the words of a previous tutor, "Groups don't learn, individuals learn". The tutorial, then, is the place where learning issues are developed and information is shared, discussed and integrated back into the medical problem. Further, it is a place where clarification of concepts can occur as well as a place to share useful resources.

As you can see from the outline on the previous page, there are three primary activities which occur in the tutorial group. First, you will be learning how to use and apply the reasoning process for the solution of medical problems. Second, you will be improving on your ability to communicate with others, both in regard to medical information and interpersonal skills. Third, you will be learning self - and peer-assessment skills.

Your group must establish its own modus operandi and establish what rules it will follow. How your group operates is up to you. However, keep in mind what the purpose of the tutorial is and frequently evaluate whether your particular tutorial group is making adequate progress toward that purpose.

Throughout the rest of this document we discuss a number of behavioral objectives for the tutorial that we have established and give you some suggestions as to how you might effectively proceed. For example, probably one of the first issues you will encounter will be how often your group should meet. Your decision will depend on how the group feels and how much time is available. In the past, groups have generally met at least twice and usually three times a week, at spaced intervals for sessions of 2-5 hours. Remember: Each individual is responsible for his/her own learning, and for making sure the tutorial meets his/her needs.

What follows surveys the functions of the tutorial and offers some useful suggestions.

I. USE PROBLEM-BASED LEARNING IN THE GROUP

You and your group are expected to utilize, at least at the outset, the PCC model of the reasoning process to facilitate your problem-based learning. Your group may want to modify this process subsequently as long as you can show that any such changes make your learning more efficient and effective.

With each case, the group is strongly encouraged to keep a record of its progression through the reasoning/learning process (see document on Reasoning Process). An effective means for recording the reasoning process is to use large newsprint sheets and felt-tip markers. You should take turns as recorder. Copies of the transcribed information could be made available to rest of the group, so as to serve as a record

for later reference when you come in contact with similar cases, for general review, and for preparation for the "Individual Process Assessment" (IPA), which is given for evaluation at the end of each unit. For certain cases during the unit, you will be expected to first develop the case independently and then bring this work-up to the group for comparison and evaluation with those of other members. This exercise will function to assess the reasoning process of each member of the group and to identify individual strengths and weaknesses. This should also be an additional help for preparation for the IPA.

A. Actively Discuss and Develop an Approach to Case Problem(s).

At the initiation of a case, your group will actively discuss and develop an approach to it. Initially, it may be more effective to open up the group to "brain storming", with each member, in turn, freely suggesting initial ideas. This should be limited to a relatively short period of time, e.g., 15 minutes, after which the group can then pursue those ideas deemed most fruitful to further develop the case and identify learning issues. You will develop the case as far as you can, drawing upon the collective knowledge of the group in terms of data gathering, informational knowledge, and hypothesis generation.

B. Identify Appropriate Learning Issues and Resources for Information.

The discussion should enable the group to identify key learning issues. In some cases, it may be more effective for each member of the group to study the same issues. At other times, it may be more effective for individual group members to study different learning issues with the aim of integrating those areas of study back into the case at the next meeting. It is important that all members communicate to the group the types of resources that were particularly helpful to them. It should be emphasized that with each case, each of you should seek to primarily study areas which you have not dealt with previously or those areas of which you do not yet have an adequate understanding. Yet you should periodically attempt to re-apply to the current case information learned in the past.

C. Summarize, Discuss and Integrate Back Into the Problem Information Obtained From Individual Learning.

With the newly-acquired information, the group can now pursue the case further either to its final resolution or to another point where additional study is needed. The group will serve as a very effective reference point by which you can assess the depth and breadth of information you are obtaining in comparison to other members.

II. USE THE GROUP TO DEVELOP EFFECTIVE COMMUNICATION SKILLS

It is important to everyone to communicate effectively to make the tutorial successful. This entails communication of information as well as feelings at the personal level. We are all developing professionals, and we come together with varying abilities to communicate; it is only through active practice that we can improve upon this ability. It is important that each member become an active participant in the group in order to contribute his/her unique knowledge and ideas to the learning process.

A. Transmission of Information

You will have the opportunity to present information to the group in a variety of ways. Each of you will be expected to periodically present and summarize information about the patient from the case, just as you will have to do as a practicing physician. You will also have the opportunity to summarize information and concepts to the group either from what you already know or from what you have learned. It should be emphasized that these are not envisioned as "mini-lectures" or "show and tell times", but rather they should be delivered as succinct personal communication tailored to meet the needs of the group. A clear or unique description of a concept can be particularly helpful to the group since this is frequently more difficult to learn than are facts. At times, this communication may be better done outside of the group if only 1 or 2 members are interested, or if time is inadequate during the group meeting. Group time also offers an excellent opportunity to share references and resources which are particularly clear and helpful.

Another important area of communication is to formulate appropriate questions relevant to the case. The only question which can be considered "stupid" is the one that is not asked. In our experience, questioning is one of the most important means of facilitating learning, not only for the individual asking the question but for the group as a whole. It can serve to keep the group focused and from getting "bogged down". It also can help other group members by forcing them to clarify more precisely information and concepts which they are presenting.

An area which is sometimes overlooked is clarification of terms being used in regard to definition and pronunciation. It is estimated that during his/her medical training, a student must learn 10-20,000 new terms. It is of vital importance that each of you acquire and practice this "language of medicine". If you are unsure of a term being used, you should seek clarification from the group.

B. Interpersonal Interactions

It is essential that the tutorial becomes more than a cold, pragmatic assessment of medical cases and information. We all communicate more effectively when we can open up with our true feelings and share "who we are". Effectively communicating feelings and personal concerns to a group in a manner which provides for constructive resolution does require a degree of skill not necessarily developed by all of us. Any group of people who work together closely and consistently over time is going to experience issues of conflict, time management, varying leadership styles, listening abilities, and abilities to give constructive criticism and feedback. These are all skills that can be taught, but are best learned in the context of experience, i.e., at the time when the group is confronted with the problem involving any of these issues. The responsibility for improving group communications lies not only with the tutor but with every member of the group.

III. USE THE GROUP TO ASSESS THE PERFORMANCE OF THE GROUP, PEERS AND SELF.

We need to be able to assess ourselves, our peers, and the group as a whole in four areas: learning of basic and clinical science information, use of reasoning process, identification of appropriate informational resources, and use of communication and

evaluation skills.

This is one of the most important and difficult areas which must be dealt with in the tutorial. It is next to impossible to grow as professionals or individuals without honest and open assessment of our behavior. Others are usually reluctant to give us open criticism unless we actively encourage it and honestly desire to receive it. Further, unless we really want to be evaluated by others, their comments will often be ignored or misperceived. Criticism should not be construed by the recipient as a personal attack. To lessen the likelihood of that occurring, your comments should be given in a context of caring and honesty and, most importantly, should address specific items which the receiver can change or modify. Further, we should make sure that we address those aspects of the person being evaluated that he/she asked to have assessed.

IV. USE THE GROUP FOR SUPPORT: (A) EMOTIONAL NEEDS, (B) SOCIAL INTERACTION, AND (C) PERSONAL GROWTH.

The tutorial is a small group of people with common interests and concerns and similar goals. It provides a unique opportunity for individuals to provide and receive support in several areas common to personal well-being. Opportunities often arise for individuals within the group or the group as a whole to administer to emotional needs. It also provides opportunity for social interaction and the development of friendships. Finally, through its openness and caring, the group can enhance each individual's growth.

PROBLEM-BASED LEARNING

INTRODUCTION

Problem-based learning is a process whereby students learn by utilizing a problem as a stimulus to discover what information they need to learn in order to understand and move toward the solution of a problem. In the case of the Primary Care Curriculum, the instruments used in the learning process are biopsychosocial problems of selected patients. These will be presented to you in a variety of formats.

It is most important that the student develop a rational system of inquiry in order to effectively identify what he/she needs to learn in order to understand the underlying mechanism of the problem and, in addition, to proceed with obtaining the most likely solutions. This reasoning process has been called the "Clinical Reasoning Process". If you examine the elements of the reasoning process, however, you readily recognize that the process is really a general mechanism for providing a rational approach to any problem, but in our situation, the language is that of medicine.

Before defining the reasoning process, one general statement is probably in order. It is recognized that different people will eventually shift or add to the elements of the process according to their background, their perception of the world and their perception of rationality. These differences are perfectly acceptable. One must only be sure that the final process is, in fact, reasonable. With these forewarnings in mind, it is intended to present a model of the reasoning process. It is presented only because it is one which has received a lot of attention and has been found to be used, in its essential elements and sequence, by a number of recognized excellent physicians (See Barrows and Tamblyn, Problem-Based Learning: an approach to medical education, Springer Co., New York, 1980).

I. The Reasoning Process

A. Identify Problem(s).

Identifying problems involves answering the question: "What is wrong with the patient?" As a rule, most patients will state at least one major problem when they tell the physician why they have come to see him/her. A patient may have more than one problem. It is the job of the physician to discover these problems through inquiry, examination and other evaluative procedures. The identification of problems is a continuous procedure.

B. Generate Hypotheses of Causes and Mechanisms by Which "Cause" Creates Problem(s).

Consider an individual who comes to your office with chest pain, i.e., the problem. To generate ideas about causes, one must ask the question: "What kinds of conditions can lead to chest pain?" One approach might

be to relate the "problem" to the various organ systems. A beginning list might include:

- 1) A muscle in the chest is damaged (neuro-muscular);
- 2) Something is wrong with the patient's heart (cardiovascular);
- 3) Since stomach problems often result in pain in the chest, something could be wrong with the patient's stomach (gastrointestinal);
- 4) Something has happened to the patient's lungs (respiratory).

In a like manner, hypotheses about mechanism might include the following:

- 1) Muscle damage could be caused by being hit by a ball or straining during lifting;
- 2) Pain originating from the heart could result from an infectious process in the fluid surrounding the heart;
- 3) The stomach could cause pain by being the site of an ulcer or a cancer; it can occasionally penetrate through a defect in the diaphragm and thereby be eroded;
- 4) An infectious process within the lungs could cause pain or a rubbing of the lining of the lungs (pleura) against the chest wall, which can also cause discomfort.

You will note that the hypotheses about mechanisms are somewhat more specific than hypotheses about causes. As you investigate further, you will note that the increase in specificity of hypotheses is the usual course of the process.

As you look at the list, it is certain that you have thought of additional causes and mechanisms. This is an important point: The physician should continuously re-examine the list of hypotheses concerning causes, adding to it and eliminating depending on other new information.

C. Rank Hypotheses

As you generate your list of hypotheses, you will automatically start to think that certain causes and mechanisms are more likely to be correct. This process is called ranking of hypotheses. Once you have ranked your hypotheses, you will want to further investigate what is actually wrong. One usually starts by going down the list, raising certain hypotheses higher on the list, lowering some, and possibly adding new ones depending upon what further information is obtained.

D. Test Hypotheses Using Present Data and Information and New Data and/or Information.

The way in which one goes about testing an hypotheses involves accumulating information which is either consistent or inconsistent with

a given view. Care must be taken to seek and give equal weight to consistent and inconsistent information.

1. History and Physical Data

One can gather data while examining and talk with the patient. For example, in the illustration in the proceeding section, one might suspect some kind of recent physical event if the cause of the chest pain were muscle damage. Careful questioning about accidents or undue physical exertion may help to assess this hypothesis.

2. Laboratory Data

Another source of data is through the use of laboratory and other diagnostic tests such as x-rays. Using the example of chest pain again, if one suspected damage to the heart, it might be detected on x-ray or on analysis of blood for certain constituents released from damaged tissues.

3. Information from Resources

Following are a few sources of data/information gathering; these are meant to be illustrative rather than all inclusive.

- (a) One can obtain information from the library. Such information could come from determining which causes are most frequently associated with chest pain. One could determine if different causes of pain are associated with different qualities of pain. Reading can also be useful in indicating what steps one can take next in order to further test the hypotheses. It will help you in answering the question, "What do I need to know to understand what is happening?" One event which must occur when using the library (or for that matter any other resource) is to continuously evaluate and validate the information you are obtaining. Does it really relate to the problem you are considering? Are the data which have been presented in the articles sound and valid? Are the conclusions consistent with the data?
- (b) You can get information from your colleagues and from experts in different fields. Having gathered the data, you now have to decide what to do with it.

E. Rerank Hypotheses

Sometime during the data gathering process you will want to step back and ask yourself what have you found out and what it means. In order to do this, one has to first summarize in some way all of the data obtained. Having put it into some kind of useable form, the next step is to ask how the data help differentiate any one of the several hypotheses you have generated. You may also want to add new hypotheses at this point. You may also want to rerank your hypotheses.

There is no set rule as to how often one should summarize and analyze data. It will depend on your own style, the nature and severity of the patient problem itself, as well as the nature of the new data you obtain. At this point, you may have decided that you need additional data; you can go back to collecting it from the appropriate sources and repeat the steps in the process.

During the process of summarizing and analyzing the data you will be putting the data into certain patterns which will indicate that one or more of the hypotheses are unlikely and that one or more are likely. When you have a reasonably adequate amount of information, it may then be possible to redefine your hypotheses in terms of specific clinical entities. These "working" hypotheses will relate to what is wrong with the patient, and you will generalize the data into as complete a picture of what is wrong as possible. In medical terminology, this is called reaching a diagnosis or diagnoses. At this point you may also want to ask new questions and decide how you are going to answer them.

F. Treat to Manage Problems.

This involves development of a treatment plan, and at early stages in your education you may not proceed very far in this step. However, you may at least proceed by asking the question, "What do I do for the patient now that I think I know what is wrong?" The steps should be put into a rational model similar to the one presented above.

II. PROBLEM BASED LEARNING

A. Identification of Learning Issues

During the course of developing hypotheses and gathering data, you have probably asked questions for which you did not have ready answers. Using the chest pain example once again, you may have wondered how stomach difficulties result in chest pain. When such a question is asked, you have identified a "learning issue", i.e., an issue about which you would like to have further knowledge. During the complete course of analysis of a patient's problem(s), a large number of such learning issues will appear. There will be many occasions when the number of such learning issues will appear. There will be many occasions when the number of issues will be greater than can feasibly be investigated in the

time available to you. In such instances, you will have to make decisions as to which issues will be pursued. Such decisions may be made in collaboration with other members of your tutorial group. Other issues which you may want to pursue should not be neglected, but pursuit of those issues may have to be done outside the time devoted to preparation for a tutorial.

B. Evaluation of the Process and Knowledge Obtained

There are two aspects with which one should be concerned in evaluation: the reasoning process itself, and evaluating what was learned.

(1) The reasoning process itself

Did the steps you took lead to a reasonable decision about the difficulties of the patient? Did the problem make you identify learning issues and stimulate your desire to learn? Was what you learned of value to you in analyzing the patient problem, or was it extraneous to the critical issues?

(2) Evaluating what was learned

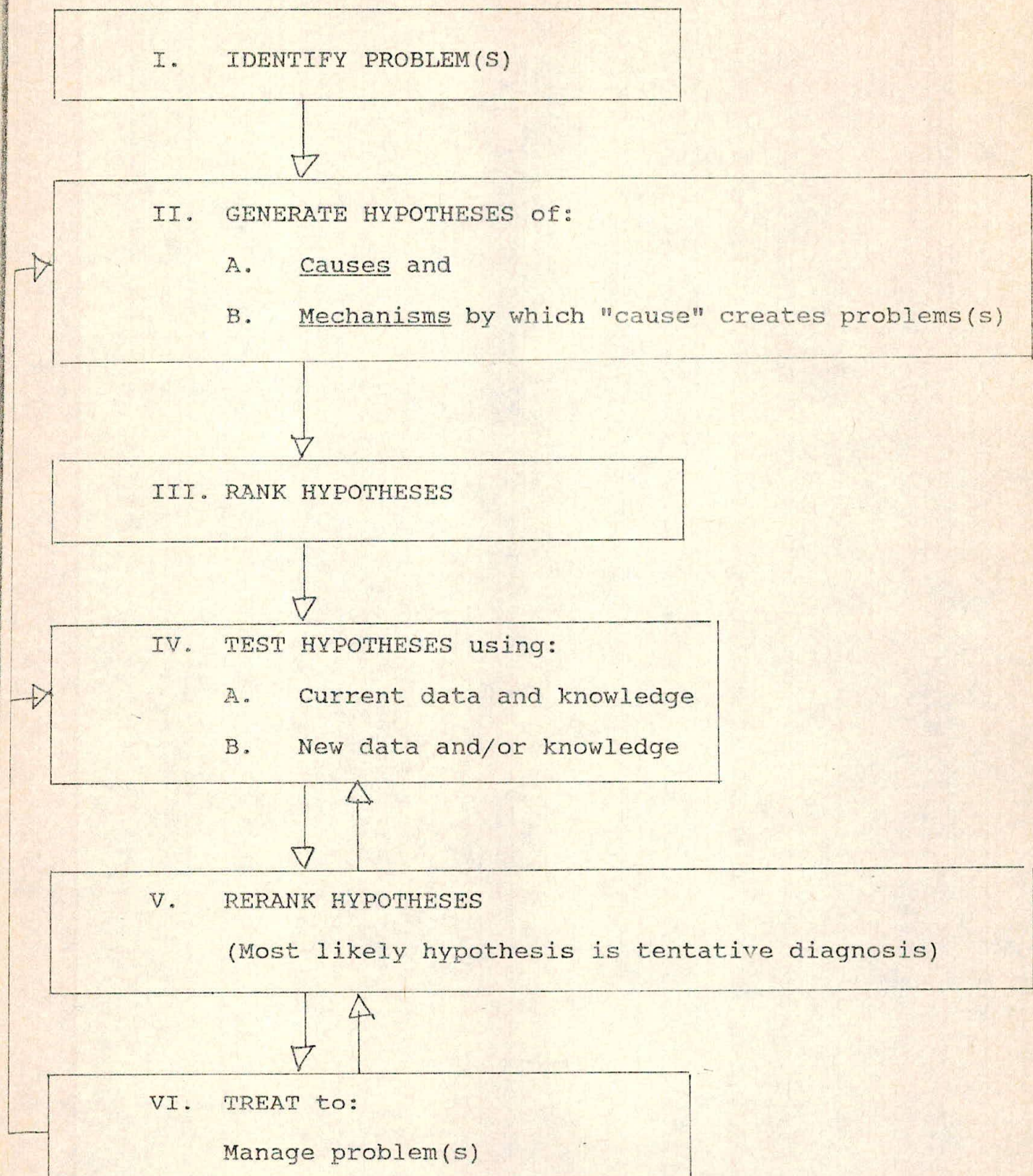
Some possible questions are: What new areas of medical science have you explored? Did you reach an adequate depth of understanding of the issues? How efficiently were you able to get the required information? What or who were the best resources? What did you learn about mechanisms of disorders? Has the information you've learned met your learning needs?

Additional questions can be asked, and some of these questions are applicable to the reasoning process as well as to the learning process.

C. Transference of Knowledge Obtained to New Situations

One definition of knowledge is that it is the functional utilization of times learned to applicable situations. In order to apply new information you must develop a system of data retention (memory) and of recall. There are probably as many ways of doing the latter as there are people. Some suggestions are file systems, organized notes, organized reference books, commitment to memory or even use of a computer. The ultimate aim is to generalize information so that it can be retained and used in the future in dealing with other clinical problems.

OUTLINE OF THE REASONING PROCESS



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EVALUATION GUIDELINES IN "PASS/FAIL" SYSTEM

The general philosophy of the Assessment Committee and the Evaluation Review Committee in PCC is that most students will do well most of the time. All students will have areas that they need to improve, and occasionally students will not perform in a satisfactory manner. The majority of students' time is spent preparing for/or functioning within the tutorial, and tutorial evaluation represents the major source of feedback for the student in the first two years of PCC.

The normal evaluation steps include written and verbal, mid-unit and end-unit evaluation by student and tutor. The student's grade for a particular unit will remain incomplete until all four documents have been turned in and reviewed by the Evaluation Review Committee. It is expected that the verbal mid-unit and end-unit evaluation will provide feedback to the student in all the areas covered by the evaluation form.

Historically, PCC has attempted various ways to foster cooperativeness and to decrease competitiveness. Students and faculty alike recognize that students are competitive, but it is hoped that the new evaluation scheme will foster healthy competition towards improving one's skills and knowledge base, rather than trying to impress faculty and others so as to improve a GPA.

It is important when filling out evaluation forms (tutorial or IPA) to describe behaviors rather than characteristics. Behaviors can be altered and, in general, characteristics cannot be. Being a "nice guy" is a positive attribute, but is not modifiable. Behaving in an interested, cooperative and compassionate way towards others is a behavior that can be encouraged.

Students and faculty alike recognize that there is always more to learn, skills to improve and style to modify, so evaluations that mention only the positive are incomplete and not helpful. Very specific suggestions for improvement or descriptions of inappropriate behavior may result in change. General and only positive comments will not allow directed change on the part of the student.

The Evaluation Review Committee reserves the right to return to faculty and students evaluation forms which have been inadequately completed. The Committee will also at times request in-person discussion, particularly when there are major discrepancies in descriptors between students' and tutors' forms.

Bert Umland, MD
8/89

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STUDENT AND TUTOR SATISFACTION IN THE CLASSROOM

It seems reasonable to look at the classroom - the interaction within as well as the products which result from that interaction - as an organization, and to apply research on job satisfaction done in more usual organizational settings to the educational setting. The conclusions below are supported by available research on job satisfaction in non-educational (classroom) settings.

1. Satisfaction depends on whether an individual's own goals are met.
2. Successful outcomes, e.g., accomplishing the task, determine level of satisfaction.
3. The amount of perceived influence an individual has determines his/her level of satisfaction.
4. The amount of perceived influence an individual has with work-related matters determines his/her level of satisfaction.
5. Having had past experience with similar work content and/or process--determines an individual's level of satisfaction.
6. Satisfaction is also dependent upon several variables related to a supportive communication climate:
 - a. the degree to which co-workers are found attractive (task attraction, physical attraction, and social attraction are all involved);
 - b. the degree to which the group is cohesive;
 - c. the degree to which members of the group trust each other;
 - d. the degree to which conflict is constructive;
 - e. the degree to which group members find it easy to communicate with each other;
 - f. the degree to which group members feel "in" on things happening in the group;
 - g. the degree to which group members get sympathetic help with job-related and non-job-related problems; and
 - h. the degree to which group members feel appreciated for their work.

From: Small Group Communication (425)
Lawrence Rosenfeld, PhD
Dept. of Speech Communications - UNM

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CHARACTERISTICS OF A FUNCTIONAL TUTOR

1. Questions and probes the reasoning process and critical thinking - elicits students' reasoning process, poses questions, challenges information, critiques
2. Facilitates and supports good interpersonal relationships in the group - open, honest, willing to facilitate critical feedback
3. Active member of the group - enthusiastic, friendly, interested in participating, has time for the group, contributes
4. Willing to serve as a resource person - limits "bog downs" in group discussion by clarifying issues or information
5. Guides/directs/intervenes - keeps group on track and/or on task
6. Promotes application/integration/synthesis of information to the patient case or other interdisciplinary issues
7. Promotes the use of resources - brings in or suggests appropriate resources, encourages use of a variety of resources
8. Flexibility - comfort with or willingness to "explore" areas outside area of expertise

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PRACTICAL SUGGESTIONS FOR TUTORS TO FACILITATE STEPS OF THE REASONING PROCESS AND PROBLEM SOLVING

SUMMARY

1. Tutor encourages analysis, synthesis, and evaluation of data.
2. Tutor encourages students to model his/her behavior in asking for reasons, justifications, etc.
3. Tutor intervenes appropriately to keep discussion on track, to give information, and to stimulate thinking.

SUGGESTIONS

1. Tutor elicits student's reasoning process. If student asks for more information from the presenter, e.g., "Did patient vomit?", tutor might ask "What are you hoping to find out? What are your reasons for asking that question? How would knowing the answer make a difference in your approach to the patient's problem?"
2. Tutor encourages hypothesizing, asks for the reasons why specific hypotheses are suggested, and elicits evaluation of hypotheses. Tutor might ask, "What do you think is going on with this patient? What reasons do you have for offering that specific hypothesis? What evidence would rule in or out these hypotheses?" One student suggested that tutor should ask, "What disease, or other processes could have caused this?", rather than asking, "What caused this?" The student thought that the former approach would elicit many hypotheses to work through and evaluate.
3. Tutor maintains continuity and focus of discussion by asking for periodic summary, for evaluation about what has taken place, and where discussion is going. Tutor might ask, "Will someone summarize what has taken place thus far? Who would want to summarize that presentation in thirty seconds? What would we look for now with this patient?"
4. Tutor encourages students to make connections. Tutor might ask, "What is the association between hypertension and headaches? How might interdisciplinary issues about patient life-style be related to this case?"
5. Tutor emphasizes open-ended questions to promote discussion rather than focusing on yes/no type questions or emphasizing quiz-type questions which are not integrated with discussion.
6. Tutor emphasizes mechanisms and causes of patients' problems. Tutor might ask, "What processes could have caused this problem? What are the mechanisms involved here?"
7. Tutor periodically asks students to explain and define medical terminology used. Tutor might ask, "What is cholesterol? What does that level of cholesterol usually mean?"
8. Tutor does not simply answer all questions that are asked, but appropriately

deflects them back to the group. Tutor might ask, "Does anybody know the answer? How might we go about answering that question? What impact will the answer to your question have in regard to approaching the patient's problem?"

9. Tutor encourages students to refine their presentations and make them more precise. Tutor might ask, "How might you quickly summarize what you have been saying? What's a more precise way of saying that? How could you better organize that to get your point across more effectively?"

From Tutor Notebook, University of Illinois School of Clinical Medicine at Urbana-Champaign.

WHAT TO LOOK FOR IN GROUPS

An Observational Guide to Group Process

In all interactions between people, there are two major ingredients: **content** and **process**. The **content** is the subject matter or the task on which the group is working. In most situations, the focus of attention of all persons is on the content of what is being discussed. The second ingredient is the **process** by which the discussion is taking place, or the task that is being pursued. Process is a term used to refer to how people are working together; it is concerned with what is happening between and to group members while the group is working on its task.

To study group process, or group dynamics, means to learn about communication, influence, decision-making, styles of leadership, struggles for control, competition for prominence, morale, conflict, cooperation, feelings about the task and how the group is working, and whether people are listening to one another and responding to one another, etc. To be concerned about group process is to be concerned about the extent to which a group is utilizing its resources most effectively.

In most situations, little attention is paid to process, because the task consumes most of our energies and interest; this often remains the case, even when a group's ineffective process is the major cause of the difficulties it is having with its task. Awareness of group process and sensitivity to its importance enable us to identify group problems effectively. Since every group has a process, and sometimes has some difficulties with its process, awareness of this important area enhances a person's value to a group and is likely to make him or her a more resourceful participant in the group's work.

Below are some observational guidelines to help observe and talk about group process.

A. Participation

One indication of involvement is verbal participation. Look for differences in the amount of participation among members.

1. Who are the high participators?
2. Who are the low participators?
3. Do you see any shift in participation, e.g., highs become quiet; lows suddenly become talkative. Do you see any possible reason for this in the group's interaction?
4. How are the silent people treated? How is their silence interpreted? Consent? Disagreement? Disinterest? Fear? Boredom?
5. Who talks to whom? Do some people respond almost exclusively to certain others in the group? Do you see any reason for this?
6. Who keeps the ball rolling?
7. Look for instances of nonverbal participation. Do some people frequently communicate non-verbally? What kinds of things do they say?

B. Influence

Influence and participation are not the same. Some people may speak very little, yet they capture the attention of the entire group. Others may talk a lot, but people pay little attention to them.

8. Which members are high in influence, i.e., when they talk, others seem to listen?
9. Which members are low in influence, i.e., others do not listen to them or follow them; is there any shifting of influence?
10. Do you see any rivalry in the group? Is there a struggle for leadership? What effect does it have on other group members?

C. Decision-making Procedures

Many kinds of decisions are made in groups without considering the effects of these decisions on other members. Some try to impose their own decisions on the group, while others want all members to participate in the decisions that are made.

11. Does anyone make a decision and carry it out without checking with other group members (self-authorized decision)? For example, a student decides on the topic to be discussed and starts right in talking about it. What effect does this seem to have on other group members?
12. Does the group drift from topic to topic? Whose suggested topic receives the best response?
13. Who supports other members' suggestions or decisions? Does this support result in the two members deciding the topic or activity for the group (handclasp decision)? How does this appear to effect other group members?
14. Is there any evidence of a majority pushing a decision through over other members' objections? Do they simply run over any minority?
15. Is there an attempt to get all members participating in a decision (consensus testing)? What effect does this seem to have on the group?
16. Do people make contributions which do not receive any kind of response or recognition? What effect does this seem to have on the person?

D. Task Functions

These functions illustrate behaviors that are concerned with getting the job done, or accomplishing the task of the group.

17. Does anyone ask for or make suggestions as to the best way to proceed or deal with a problem?
18. Does anyone attempt to summarize what has been covered or what has

been going on in the group?

19. Is there any giving or asking for facts, ideas, opinions, feelings, feedback, or searching for alternatives?
20. Who keeps the group on target, prevents "topic jumping" or going off on tangents?

E. Maintenance Functions

These functions are important for maintaining relationships between members of the group. They are necessary to create effective working relationships among the members.

21. Do members show an interest in one another?
22. Are members asked for their opinions? Are differences of opinion respected and encouraged?
23. What is done to maintain a free and orderly discussion?
24. How are differences resolved? How are conflicts handled?
25. Does the group pay attention to members' feelings as it proceeds with the work? Are there tensions that are not dealt with?

F. Feelings

During any group discussion, feelings are frequently generated by the interactions between members. These feelings, however, are sometimes not talked about. Observers may have to make guesses based on tone of voice, facial expressions, gestures, and other forms of nonverbal cues.

26. What signs of feelings do you observe in group members: anger, irritation, frustration, warmth, affection, excitement, boredom, defensiveness, competitiveness, etc?
27. Do you see any attempts by group members to block the expression of feelings, particularly negative feelings? How is this done? Does anyone do this consistently?

G. Norms

Standards or ground rules always develop in a group in order to control the behavior of members. Norms usually express the beliefs or desires of the majority of the group members as to what behaviors should or should not take place in the group. They are do's and don'ts. These norms may be clear to all members (explicit), known or sensed by only a few (implicit), or they may operate completely outside the awareness of the group members. Some norms help group progress and some hinder it.

28. Are certain areas avoided in the group (e.g., discussing how people feel about what others are doing, openly confronting conflict, talking about the leader's behavior, etc.)? Who seems to reinforce this avoidance? How do

they do it?

29. Are group members overly nice or polite to each other? Are only positive feelings expressed? Do people avoid disagreement and seem to agree with each other too readily? What happens when people disagree?
30. Do you see norms operating about participation or the kinds of questions that are allowed (e.g., "If I talk you must talk. If I share my reactions, you too must share your reactions.")? Do people feel free to probe each other about their feelings? Do questions tend to be restricted to intellectual topics or events outside the group?

All of the above factors are included within the concept of group process. This is a new term for most of us. When we talk about how we are working together, this is a discussion of process. It is often useful for groups to learn to encourage members to share their ideas and feelings about how the group is working, and to do so at the same time the group is working on its task. In addition, groups frequently choose to schedule the last few minutes on their agenda for a process discussion, i.e., how did we work today, and what can we learn from this meeting that will help us work together more effectively in subsequent meetings?

The reason for learning to talk about process is, of course, to facilitate work on the task.

CRITERIA FOR FEEDBACK

Feedback is a way of helping another person to consider changing his behavior. Feedback is communication to a person which gives him information about how effective his work or actions appear to be. Feedback helps an individual to keep his behavior "on target"; thus, it helps a person to better achieve his/her goals.

Some criteria for useful feedback are described below:

1. Feedback is descriptive rather than judgmental. Describing one's own reaction to another person's work leaves the other person free to use the feedback or not use it, as he/she sees fit. Avoiding judgmental language reduces the other's need to respond defensively.
2. Feedback is both positive and negative. A balanced description of a person's behavior or actions takes both the strong and weak points into account. Both give the other information for change.
3. Feedback is specific rather than general. To make a general statement about another person's work as a whole does not tell a person which parts of his/her performance or actions need changing and which might serve as models.
4. Feedback takes into account the needs of both the receiver and the giver of the feedback. What you say to a person about his/her performance not only reflects his/her work or actions, but also how you think or feel about them at the moment.
5. Feedback is directed at behavior which the receiver can do something about. When a person is reminded of some shortcoming over which he/she has no control, the major change is in terms of an increased frustration level.
6. Feedback is solicited rather than imposed. Feedback is most useful when the receiver himself has formulated the kind of question he/she most wants an answer to.
7. Feedback is checked to insure clear communication. What the giver intends to say is not always synonymous with the impact it has on the other person. Asking about the meaning of doubtful feedback can clear up the discrepancy.
8. Feedback is directed primarily at a person's performance or behavior rather than at the person him/herself.
9. Feedback is most useful when given immediately after work has been completed or behavior has been exhibited.

From: Cooperative Learning Project, University of the District of Columbia

FACTORS THAT AFFECT THE COURSE OF CONFLICT

	<u>Cooperative</u>	<u>Competitive</u>
Interpersonal relations	<p>Open lines of communication that furnish relevant information to members.</p> <p>Cooperation is more practical than competitive.</p> <p>Each party is concerned with informing and being informed.</p> <p>Open and honest communication is better than no communication.</p>	<p>Lack of communication.</p> <p>Misleading communication.</p> <p>Spying, infiltrating to gain upper hand.</p> <p>Information receiving is more important than information giving.</p>
Perception	<p>Parties look for similarities and common interests.</p> <p>Each shares common fate, mutually dependent for maximum gains, minimum losses.</p> <p>Individuals willing to minimize differences brought to situation.</p>	<p>Recognize and exaggerate differences (values, goals, concerns).</p> <p>Produces stronger bias toward genuinely misperceiving others neutral or conciliatory actions as antagonistic.</p>
Attitudes toward one another	<p>Encourage trusting, friendly attitude.</p> <p>Characterized by accurate, well-informed cognitions, positive feelings.</p> <p>Willingness to act supportively in response to needs or requests arising from conflict.</p>	<p>Breeds hostility, negative attitudes.</p> <p>Facilitates desire to exploit needs of others and respond negatively to requests.</p>
Task orientation	<p>Willingness to define terms of conflict.</p> <p>Each party must collaborate in pursuit of solutions.</p> <p>Recognizes legitimacy-rights of others interests.</p> <p>All parties utilize power, influence, talents jointly.</p>	<p>Any resolution must be biased toward one side or other. No mutual gain. Strategies involve enhancing one's own and diminishing others power.</p> <p>Others concerns are not as important as own.</p> <p>Tends to expand agenda past problem to other issues. All-out testing, not one issue.</p>

- Summary:
- 1) Each style encourages behaviors leading to more of the same behaviors.
 - 2) Wisdom: knowing what behaviors are indicated so that correctives may be applied expediently.
 - 3) Competitive processes hinder conflict resolution; cooperative processes facilitate conflict resolution.

Adapted from: M. Deutsch, "Conflict and Its Resolution," in C. Smith (ed.), Conflict Resolution Contributions of the Behavioral Sciences (Notre Dame, Ind.: University of Notre Dame Press) 1971.

MANAGING INTERPERSONAL CONFLICT

To resolve interpersonal conflicts, you need to find effective ways of communicating during a conflict, and of course, you want to create an outcome satisfying for everyone concerned. There are primarily three styles of resolving conflicts, each has its advantages and disadvantages.

Win-Lose:

Win-lose conflicts are ones in which one person gets what he or she wants while the other comes up short. The most common conflict strategies used in win-lose conflict are power, dominance, and forcing. Of course, "power" may be presented in physical threats, use of authority, or even intellectual or mental ways (such as driving your opponent crazy through the use of "crazymakers").

Lose-Lose:

In lose-lose methods of problem solving, neither person is satisfied with the outcome. While this might appear a rather discouraging approach, in fact it is one of the most common. The most respectable form of lose-lose conflict uses a compromise strategy. Interestingly, however, while we might find the people in a conflict who compromise rather admirable, we view a compromise of values, beliefs, and ideas unfavorably.

Win-Win:

In this type of problem solving the goal is to find a solution satisfying to everyone involved. The belief guiding win-win conflict is that by working together it is possible to find a solution with which everyone reaches his or her goal without needing to compromise. Integration, collaboration, and problem solving are the strategies associated most often with win-win conflict.

The "managing interpersonal conflict" technique outlines six stages or steps, each with its specific goals and relevant skills. The emphasis is on the specific intrapersonal and interpersonal skills necessary to successfully engage in win-win conflict. The cornerstone to the successful implementation of the technique is the development and maintenance of a supportive, confirming communication climate.

STAGE 1:

Evaluating the conflict interpersonally. Before communicating with the other person, the people in conflict identify what is really bothering them. Each tries to answer the following questions: What are the causes of the conflict? When should the conflict be discussed? Where should the conflict be discussed?

The skills necessary at this stage are the ability to identify and describe your own feelings and recognize that you "own" them, that is, they are your feelings. Describing the other person's behavior in a non-evaluative way is another necessary skill which includes separating fact (what is observable) from inference (ascribing "reasons" and "motivations" to the other which cannot be known from direct experience). Finally, the ability to empathize with the other person is necessary.

At the end of this stage, you and the other person understand the conflict from

an intrapersonal perspective: You understand your own behavior and feelings, and your perceptions of the other person's behavior and feelings. These descriptions are the material used as the basis for discussion during Stage 2.

STAGE 2:

Defining the conflict interpersonally. During this stage, you and the other person share your perceptions in an attempt to uncover the nature and causes of the conflict. Questions to be answered during this stage include: What are the individual perceptions of the conflict? Can a mutual definition of the conflict be arrived at?

The skills necessary at this stage relate primarily to developing a supportive and confirming climate. The ability to be nonjudgmental, descriptive, empathic, and nontangential are important support-producing behaviors. The confirming behaviors of relevance here include owning and describing your feelings, listening actively to the other person, and sending congruous verbal and nonverbal messages.

At the end of this stage, you and the other person have shared your perspectives and understand how the other sees the situation. You have also come a long way toward establishing a supportive communication climate which helps the process of conflict resolution to continue.

STAGE 3:

Interpersonally identifying mutually-shared goals. Considered the most important stage, the major purpose now is for you and the other person to express your needs and desires-your ultimate goals. This stage requires the honest disclosure of each person's goals. This serves a variety of purposes; for example, each person learns how far apart he is from the other person. If goals are vastly different it may be necessary, at a later stage in the process, to alter the relationship dramatically, or even end it.

Disclosure here may also cause you and the other person to re-examine what was discussed during Stage 2: The new information may lead to a reassessment of the causes of the conflict. Finally, disclosure tells the other person he is trusted and significant, an important part of establishing a supportive, confirming climate.

The questions which you and the other person attempt to answer during this stage include: What goals are we attempting to satisfy? Which of these goals are mutually shared? Which of these goals are important in formulating a way to resolve the conflict? The skills necessary to answer these questions, in addition to those discussed under Stage 2, include the ability to identify the positive aspects of the conflict management effort ("I'm glad we're talking this over together." "The fact that you want to talk this over tells me we both think our relationship is important.") and the ability to be problem-oriented and not controlling.

At the end of this stage, you and the other person have uncovered mutually shared goals based on your understanding of each other's needs, desires, and individual goals. No solutions have yet been generated, but the necessary information has now been gathered to move on with that important step.

STAGE 4:

Interpersonally identifying a variety of possible resolutions. The purpose of this stage, generating solutions, is fulfilled by answering the following questions: What are the possible ways to resolve the conflict? Have we considered all the possible ways?

Along with the skills necessary for completing Stages 2 and 3, the following skills are pertinent to Stage 4: The ability to communicate professionalism rather than certainty, and the ability to refrain from premature evaluation of any solution.

At the end of this stage, you and the other person have generated a list of possible solutions. What remains now is for each solution to be critically examined in light of the mutually-shared goals.

STAGE 5:

Interpersonally weighing goals against possible resolutions. Stages 3 and 4 are brought together during this stage as each Stage 4 resolution is examined for the ability to satisfy Stage 3 goals. The questions which need to be answered include: How does each resolution stand up against the goals? Which resolution satisfies the greatest number of goals? Can we agree on the best resolution?

All of the skills previously mentioned are also applicable at this stage. In addition, supportive behavior also becomes specifically relevant at this time, the ability to react spontaneously rather than in a strategic fashion.

At the end of this stage, it may seem as if the process conflict resolution is over. After all, the conflict has been defined individually and mutually, goals have been established, solutions generated, and the best resolution agreed upon. To stop now assumes that any solution is forever, that time does not change things, that people remain constant all the time, that events never alter circumstances. Of course this is not true, so a last step seems to be included which is as relevant as the others.

STAGE 6:

Interpersonally evaluating the chosen resolution after a period of time. The purpose of this stage is to review the resolution from time to time and assess if it needs to be changed, modified, or left alone. Reviewing the aspects of a selected resolution does not mean that something is wrong and must be corrected. Indeed, everything may point to the conclusion that the resolution is still working to satisfy the mutually-shared goals, and that the mutually-shared goals are still the important ones to consider.

This stage requires all the skills discussed under the other stages, plus one additional one: The ability to be honest with yourself as well as the other person. It may be difficult for you to say, "We need to talk about this again," and yet it may be essential if the conflict is to remain resolved. Because a conflict resolution strategy needs to be evaluated now and again does not in any way point to some personal failure on the parts of the people in conflict. If anything, it demonstrates how realistic they are.

The six-step "managing interpersonal conflict" technique is adapted from Deborah Weider-Hatfield, "A Unit in Conflict Management Communication Skills," Communication Education, 30 (July 1981), 265-273.

Also - Ronald B. Adler, Lawrence B. Rosenfeld, and Neil Towne, Interplay: The Process of Interpersonal Communication, 2nd. ed., (New York, Holat. Rinehart and Winston, 1983).

TRANSFORMING NEGATIVE CLIMATES: COPING WITH CRITICISM

Changing a negative climate to a positive one is like slowing down a runaway horse: You have to stop the animal before you can begin to move toward your destination. One of the biggest barriers to overcoming negative climates--our runaway horse--is the torrent of negative criticism characterizing them. Two methods are available to handle criticism constructively, without feeling the need to justify yourself or to counterattack. The first considers seeking out more information, and the second concerns agreeing with the person who is criticizing you.

When criticized, seek more information

1. Ask for specifics to clarify the nature of the criticism.
2. Guess about specifics if the other cannot provide them.
3. Paraphrase ideas to clarify them and to draw the other person out if he or she is confused or reluctant.
4. Ask about the consequences of your behavior for the other person so that you may begin to understand his or her needs.

When criticized, agree with the speaker

There is virtually no situation in which you can't honestly accept the other person's point of view and still maintain your position. Arguing with the critic creates a more defensive climate and guarantees that there will be no resolution to the conflict.

There are four types of agreement, each of which may be expressed in different circumstances:

1. Agree with the truth. Agreeing with facts seems quite sensible when you realize that certain matters are indisputable. Agreeing with the judgment may not be quite so easy. For example, "You're an hour late, you idiot!" may be easy to agree with on a fact level (you may indeed be an hour late), and hard to agree with on a judgment level (you may not view yourself as an idiot for being an hour late).
2. Agree with the odds. If the criticism relates to a future or probable event, agree with the odds for its occurrence. To deny another's predictions does not change the other person's mind (or your own). For example, "If you don't advertise your office, you'll never get enough people to come in!" may be responded to with "You're right. There is a chance that could happen." This agrees with the odds.
3. Agree in principle. A criticism which comes in the form of an abstract ideal against which you are being unfavorably compared may be agreed with in principle without agreeing with the comparison. For example, "I wish you wouldn't spend so much time on your work. Relaxation is important too, you know." A nondefensive, agreeing response could be: "You're right, it is important to relax."
4. Agree with the critic's perception. When there seems to be no basis

whatsoever for agreeing with the critic--there is no truth to the criticism, you can't agree with the odds, and you can't even accept the principle the critic puts forward--you may still agree with the critic's right to perceive things as he or she does. For example, "I don't believe your office is as busy as you say it is. You're probably making it up so I'll think you're fantastic." A nondefensive, agreeing response could be: "Well, I can see how you might think that. I've known people who lie to get approval."

Adapted from: Ronald B. Adler, Lawrence B. Rosenfeld, and Neil Towne, Interplay: The Process of Interpersonal Communication, 2nd ed. New York.

WIN AND LOSE - WHAT STRATEGIES TO ADOPT

Bargaining Strategy

1. Define the conflict as a mutual problem.
2. Pursue goals held in common.
3. Find creative agreements that are satisfying to both parties.
4. Have an accurate personal understanding of one's own needs and show them correctly.
5. Try to equal power by emphasizing mutual interdependence, avoiding harm, inconvenience, harassment or embarrassment to the other.
6. Make sure contacts are on the basis of equal power.
7. Use open, honest, and accurate communication of one's needs, goals, and position.
8. Accurately state one's needs, goals, and position.
9. Work to have highest empathy and understanding of another's position, feelings, and frame of reference.
10. Communicate a problem-solving orientation.
11. Avoid threats in order to reduce other's defensiveness.
12. Express hostility to get rid of feelings that might interfere with future cooperation.
13. Behave predictably through flexibility.
14. Change position to accommodate needs of the other.

Win-Lose Strategy

1. Define the conflict as win-lose.
2. Pursue one's own goals.
3. Force the other party into submission.
4. Have an accurate understanding of one's own needs, but publicly disguise and misrepresent them.
5. Try to increase power over the other party by emphasizing one's independence from the other and other's dependence upon oneself.
6. Try to arrange contact where one's own power is greater.
7. Use deceitful, inaccurate, and misleading communication of one's needs, goals, and position.
8. Overemphasize one's needs, goals and position.
9. Avoid all empathy and understanding of other's position, feelings and frame of reference.
10. Communicate win-lose orientation.
11. Use threats to get the submission of others.
12. Hostility is expressed to subdue others.
13. Behave unpredictably to make use of surprise to trick others.
14. Concede and change only when concessions are made.

15. Promote clarity, predictability, and mutual understanding.
16. Use cooperative behavior to help establish trust.
17. Seek exploration of other's similarities and differences in positions.

15. Try to increase ambiguity and uncertainty to confuse the issue.
16. Use cooperative behavior to exploit someone else's cooperation.
17. Emphasize the differences to make use of your power position.