STUDENT ACADEMIC SUCCESS CENTER
M.I.F.F. TECHNIQUES

The following MIFF techniques, when used effectively, will help the tutor in four critical areas:

<table>
<thead>
<tr>
<th>Management</th>
<th>Involvement</th>
<th>Feedback</th>
<th>Focus</th>
</tr>
</thead>
</table>

The goal for the tutor is to become proficient in using these techniques as problem-solving tools to help with class management, to increase involvement, to elicit feedback or to provide focus.

POSITIVE REINFORCEMENT of ANSWERS
This refers to attempting to find something praiseworthy about every answer. This is not to imply that all answers are correct or even have equal merit. However, when students give an incorrect answer, it may mean they misinterpreted the question or took a wrong turn in their thinking. Focusing on the good part of the student's thinking makes it more likely the student will be willing to think about the next question that is asked.

For example, when asked, "What is the numeric value of 3x4?" a student might respond with the answer "7". It is fairly clear that the student answered the question 3+4. Rather than telling the student he/she is wrong, the tutor could respond that this is the answer to the question 3 + 4 but the question was 3 x 4. This type of response not only has the benefit described above but also may encourage the student to listen more carefully next time. [This example may seem trivial to the college teacher, but we have often seen the same type of mistake in calculus with students taking the derivative when the question asks for the anti derivative.]

POSITIVE REINFORCEMENT of BEHAVIOR
Praising desirable behavior makes it more likely that this behavior will recur. There are many ways a tutor can reward good behavior. Verbal praise ("I like that . . .") is a commonly used form of PR. It is also very effective to ask the group after a good explanation, "How many people liked that explanation?"

MODE OF RESPONSE
The mode of response is the manner in which the tutor expects the students to respond. It may be by raising their hands, shouting out the answer, writing on their papers, showing on their fingers or any other mode of response. The important thing is that the mode of response is included in the question so the students are thinking about the question rather than how, or if, they should answer. [Show me on your fingers the coefficient of the anti derivative of 6x^2.]

Different modes of response give different quality of feedback and allow different types of involvement. Asking students to write answers on their papers provides accurate feedback on more students than calling on one person does. Asking them to show an answer on their fingers is quick and allows the uncertain student a safe way to participate. Because each mode of response has different MIFF benefits, it is important to vary the mode of response.

It is convenient to establish an implied Mode of Response. That is, if you normally expect students to raise their hands, it is nice not to have to preface each question with that mode of response. This can be accomplished by asking your questions with your hand raised and then positive reinforcing the students that raise their hands. After a few times it will not be necessary to raise your hand. It will then only be necessary to specify the mode of response when it is different from the one usually used. [It will always be necessary to use positive reinforcement at times to keep this behavior once it is learned.]

When a tutor allows the students to call out answers at the whim of the student, the tutor loses the ability to control the time students are allowed to think about the question. This usually results in a few students shouting out the answers while the others, knowing that they will not get it as quickly as the few, will not even engage in thought about the question. The tutor must be able to control the "wait time" if all students are to remain active participants in the learning process.
INDIVIDUAL AND CHORAL RESPONSE

Another mode of response, choral responses allow the entire group to respond to a question. This gives the tutor feedback on how many of the students know the answer. It also allows students to let off some energy and is a break from always raising hands. Individual response refers to calling on one person who has volunteered to answer the question. This does not tell the tutor much about the whole class but is certainly an important mode of response in that it tells much about what that student knows, is the only way to get a detailed oral explanation, and maintains some semblance of order in the class.

We make a clear distinction about only calling on a person who has volunteered to answer. A tutor should very rarely “cold call” on a student who has not volunteered to answer. There is a clear exception for tutors working individually with students. If the desire is to learn about the specific knowledge of a particular student in a group, a different mode of response should be chosen, such as using a paper problem and checking on the work of that specific student. This allows the teacher to maintain equity and safe space in the classroom for all students while still gaining the feedback they need from the class. This rule applies to two part questions as well. [For example, a tutor might ask students to raise their hand if they can tell her the derivative of log(x^2-3). If the tutor also wants to ask “how did you get the answer?” this question should be directed at the entire class because it is different than the one the first student volunteered to answer. By returning the question to the entire class, the tutor gains feedback about more than one student, and reinforces that it is safe to volunteer to answer a specific question without fear of having to respond to follow-up questions.

CIRCULATION (rapid & w/ babbling)

This technique is used when checking paper problems. When the tutor has asked the students to do a problem on their papers, it is important that a minimal amount of time is spent checking papers. The goal of a paper problem is for the tutor to get feedback on what the students understand, not to do individual tutoring. If the tutor takes too much time, the students that have finished will usually entertain themselves. The babbling part of this refers to the banter the tutor keeps up while circulating. This banter can include positive reinforcement of behavior, hints about what types of approaches seem to be working and can keep the students focused on the problem.

DELIBERATE MISTAKES

Tutor mistakes used appropriately can have a positive effect on a group of students. It is fairly obvious that one wouldn’t want to make a mistake during the initial presentation of a topic. However a mistake made after the students are capable of recognizing the mistake checks the students understanding/awareness, makes them feel good that they "caught" the tutor and lets them see how the tutor responds to a mistake. [While many tutors want students to recognize mistakes as an opportunity to learn, few model desired student behavior when making a mistake themselves.] If the students do not catch the mistake, it can provide valuable feedback on something the students do not understand.

SPECIFIC QUESTIONS

This technique is rather important to the method of teaching by asking questions. It is not meant to imply that one should ask only short answer questions or questions that do not require serious thought. It is meant to suggest that the student should not have to guess what the tutor means. Asking for the primary cause of the Second World War is not specific. Is the tutor asking for the students opinion, a particular authors opinion or from the perspective of particular country? Including this information in the question will focus student thought on answering the question rather than on what the tutor means or wants.
NOTE: The MIFF techniques are part of a unique teaching program. Three additional techniques that you should be aware of include: Use of Space, Use of Distractions, and Use of Finger and Hand Signals. Although more applicable to classroom teaching, these techniques could have a positive impact on a tutoring session.

USE OF SPACE
Teachers traditionally teach from the front of the class, and discipline problems usually occur in the back. Teaching from the back, sides and even the center of the room can change this dramatically. The teacher can stand so that most students are between the student speaking and the teacher. This will involve more students, cause the student responding to speak in a louder voice and avoid the response becoming a private conversation between the teacher and the student.

Moving around the room makes the teacher more aware of what is going on in the room and it enables the teacher to deal with problems in a less confrontational manner. When two students are talking, it is very effective to simply stand between them while continuing to teach. The conversation usually stops. If someone is reading the newspaper, the teacher can call on someone while standing next to the culprit. While the class is focusing on the person answering the question, the teacher can quietly ask the student to put the paper away.

Some may see this technique as coddling misbehaving students but there are important benefits. The student is still being asked to behave in a manner that is within the rules of the classroom but the request comes in a manner that has much less risk for both the student and the teacher. The student is not embarrassed, or receiving desired attention, in front of his/her peers. The teacher reduces the risk of the student refusing to conform and as a result, creating rebellion with the rest of the class as spectators. This scenario raises the stakes for both parties and makes it less likely that a reasonable solution will be found.

USE OF DISTRACTIONS
It is futile to attempt to teach when something is going on in the room that the class is going to focus on regardless of what the teacher is doing. The teacher can maintain control by asking students to focus on the distraction and then bringing them back. For example, students are not likely to ignore the department chair into the room. Suppose a question has just been asked; this distraction can be eliminated by having the department chair call on someone who has a hand raised. The teacher is telling the students to focus where they will anyway, and the department chair is putting the focus back on the person volunteering to answer the question. The teacher then regains the attention of the students.

USE OF FINGER & HAND SIGNALS
Having hand signals for things like disagreement, not understanding a question or having a question that won’t wait allows the students to express a thought or desire without disrupting the class. [Waving the arms back and forth in front of your body to indicate disagreement is particularly useful with younger children.]