To promote active student learning and improve student self-reliance, the Learning Center at Utah's Salt Lake Community College has designed several innovative training activities for peer tutors. In one activity, which seeks to demonstrate the importance of student feedback, peer tutors sit back to back while one in the role of "tutor" describes how to assemble a puzzle to the "client." In the first stage of the activity, the "client" is not allowed to give any feedback; in the second stage, feedback is limited to verbal responses; and in the third stage, visual and verbal feedback is given. Participants in the activity discuss the relative levels of frustration in each stage and methods used to overcome the communication barriers. In another activity, tutor-client pairs work on a written assignment with, at first, only the client allowed to use a pencil. After 5 minutes, the roles are reversed and participants discuss the control that the person with the pencil has over the pace and content of the session. A final activity involves intensive tutor questioning strategies designed to raise the tutor's level of questions, help them understand the value of questions in the tutoring process, to establish the extent of the client's background knowledge, and to see the helpfulness of having clients formulate concepts or overviews of problems. (TGI)
TUTOR TRAINING ACTIVITIES
TO IMPROVE STUDENT SELF-RELIANCE

Presented at the NISOD International Conference
May 21-24, 1995
Austin, Texas

Paula McBride
Learning Center Director
Salt Lake Community College
Salt Lake City, Utah 84124
(801) 957-4527

Paper presented at the Annual International Conference of the National Institute for Staff and Organizational Development on Teaching Excellence and Conference of Administrators (17th, Austin, TX, May 21 - 24, 1995)
TUTOR TRAINING ACTIVITIES
TO PROMOTE ACTIVE STUDENT LEARNING

Objectives

To provide a brief look at some of the literature in cooperative learning and tutoring

To describe several approaches for convincingly demonstrating to peer tutors that students learn best and benefit most when they work out answers to their own questions and are otherwise actively involved.

Rationale

Many peer tutors approach tutoring as mini-lectures they give to their clients. They sometimes see student involvement as time-consuming and difficult. They feel it is easier and more efficient to just tell the student the answer. But even though they "cover" more information that way, the student is not necessarily learning the information.

In tutor training sessions, tutors are involved in activities that demonstrate the value of student interaction.

A look at some of the literature

"Why is it, in spite of the fact that teaching by pouring in, learning by passive absorption, are universally condemned, that they are still so entrenched in practice?" (Dewey, 1916).

"Unless we specifically train tutors in techniques to encourage students' self-reliance, those students will continue to have the same academic difficulties which brought them to tutoring in the first place. The irony is that those difficulties will have been reinforced, not corrected, by the tutor" (MacDonald, 1994).

Three main elements improve college students' thinking skills: 1) involving students in discussion; 2) emphasizing the methods and procedures of problem solving; and 3) providing opportunities for students to verbalize their strategies (Cooper, 1995).

Students learn best when taught by someone closer to their approximate stage of development than their instructor (Cooper, 1995).
Those giving explanations (tutors) generally benefit more than those receiving the explanation (clients) (Dansereau, 1988).

"Cooperative learning [tutoring] is indicated whenever the learning goals are highly important, mastery and retention are important, the task is complex or conceptual, problem solving is desired, divergent thinking or creativity is desired, quality of performance is expected, and higher level reasoning strategies and critical thinking are needed (Johnson et al., 1991).

Teach students to understand the format of a problem and to recognize, identify, and use the systematic problem-solving skills needed (Smith, 1994).

"Your [the tutors'] goal is to work with a student in such a way that he discovers answers. In the short term, doing the student’s work is efficient because you can do it faster than the tutee; moreover, you can certainly do it faster yourself than you can help the tutee learn how to do it. In the long term, however, doing the student's work is very inefficient. The student will continue to need your help with all related work" (MacDonald, 1994, pp. 9-10).

Many researchers have discovered a strong positive relationship between the feeling students have of being in control of their learning and subsequent academic success (Hirsch, 1994).
DEMONSTRATING THE IMPORTANCE OF STUDENT FEEDBACK

JIGSAW PUZZLE
This puzzle activity was carried out in three stages to demonstrate the importance of getting student feedback. The first stage involves no feedback from the student. The tutor just tells how to do the puzzle. The second stage is similar to a phone conversation—there is open communication and auditory feedback from the student, but neither can see what the other is doing. The third stage is almost complete feedback—the tutor in effect is looking over the shoulder of the student telling him what to do.

STAGE ONE -- no feedback
A. Have students sit back to back in pairs. The person designated as the "tutor" describes to the "student" how to assemble the puzzle according to his paper. The "student" cannot give feedback in any way.

B. Discuss what tutors did to facilitate communication, such as:
   - giving an overall view (looks like a "Z," etc.), setting up some type of framework to place the pieces in, use of visual language, etc.

C. Discuss blocks to communication such as jargon, including technical or cultural terms, etc.

D. Discuss their responses to the exercise

Results

TUTOR RESPONSE
1. Frustration
2. Didn't know what strategy to use
3. Didn't know what common background was shared
4. Tutor talking into a void—-is anyone there?
5. Very time-consuming and rarely successful

CLIENT RESPONSE
1. Frustration
2. Confusion--what does he mean?
3. Confusion compounds as process builds on previous move
4. Giving up--I'll never get it anyway

Similar to:
- Tutor demonstrating a problem, asking "Do you understand?" Student replies "Yes" and goes away. Lecture method.
Stage Two--limited feedback
A. Students sit back to back in pairs as above.

B. Both "tutor" and "client" may speak freely, but they may not see each other's puzzles.

C. and D. As above

Results -- Tutor and Client Responses

1. Less frustration & confusion
2. Feeling of "connectedness"
3. Using only one modality, especially only auditory, is difficult
4. Still unable to see what student is doing
5. Need complete feedback
5. Took less time, more successful

Similar to:
Tutoring over the phone. Tutor describes how to do the problem. The client describes what he is doing, but there is not complete feedback--the visual.

Stage Three--more complete feedback
A. "Tutor" sits behind the "client," looking over his/her shoulder. The client cannot see the puzzle page, and the tutor cannot move the puzzle pieces.

Results-- Tutor and Client Responses

1. Still some frustration on the part of the tutor--he wants to move the pieces--and on the part of student--he wants to see tutor move the pieces or see the puzzle page.
2. Much easier for both participants
2. Each step clearer
3. Much less frustration--it felt good
4. Took much less time, always successful
WHO'S GOT THE PENCIL?

Assign each tutor to tutor a client, but only the student can use a pencil. Have them work on this for about five minutes, reverse roles, and then discuss.

**TUTOR RESPONSES**

1. Frustration  
2. Limited to verbal explanation  
3. Pencil gives security, confidence, control  
4. Accustomed to writing while tutoring  
5. Too slow and tedious  
6. Difficult to explain ideas without using visuals  
7. Was surprised at how slowly and incompletely the client understood his directions  
8. Uncomfortable to give up "control" of session

**CLIENT RESPONSES**

1. Worked harder  
2. Liked it but felt a bit uncomfortable--reversal of roles  
3. Felt it was too slow for the tutor  
4. Able to spend more time on what they did not understand  
5. Not sure what to write--had to "read" meaning into tutor's explanation

The one who controls the pencil controls the session--pace and content.

8. Write the 3 letters which should come next in this series.

B A A C E E D I I E M M F  _  _

9. Which set of letters is different from the other 3 sets?

a. HRTG  b. NOMP  c. XACW  d. LDFK

10. Optimist is to pessimist as __________ is to __________.

a. solace: morose  
b. sanguine: morose  
c. benefactor: patron  
d. eulogy: gloomy

From ONE-TO-ONE INSTRUCTION, Paul Treuer, 1994.
QUESTIONING STRATEGIES

Tutoring with intensive questioning

Two purposes:
  Tutors use Bloom’s Taxonomy to analyze and raise the level of their questions.
  Tutors understand the value of questions in the tutoring process.

Process
The students designated as "tutors" help "clients" to solve a problem, using mainly questions.

Student responses
1. They see the need to establish the extent of student background knowledge before they start.
2. They were surprised at responses to questions. "That’s not what I meant."
3. An unexpected result was how much of their questioning is recall.
4. They decided that one very helpful technique was to have clients formulate a concept or overview of the problem.
## CRITICAL READING/THINKING SKILLS

<table>
<thead>
<tr>
<th>LEVEL OF TAXONOMY</th>
<th>DEFINITION</th>
<th>WHAT THE STUDENT DOES</th>
<th>VERBS TO HELP DESIGN ACTIVITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>KNOWLEDGE</td>
<td>recall or locate specific bits of information</td>
<td>responds absorbs remembers recognizes</td>
<td>• tell • list • define • name • recall • identify • state • know • remember • recognize • repeat</td>
</tr>
<tr>
<td>COMPREHENSION (understanding)</td>
<td>understand communicated material or information</td>
<td>explains translates demonstrates interprets</td>
<td>• transform • change • restate describe • explain • review • infer • paraphrase • relate • generalize • summarize • interpret • give main idea</td>
</tr>
<tr>
<td>APPLICATION (using)</td>
<td>use rules, concepts, principles and theories in new situations</td>
<td>solves novel problems demonstrates uses knowledge constructs</td>
<td>• apply • practice • employ • use • demonstrate • illustrate • show • report</td>
</tr>
<tr>
<td>ANALYSIS (taking apart)</td>
<td>break information down into its parts</td>
<td>discusses uncovers lists dissects</td>
<td>• analyze • dissect • distinguish • examine • compare • contrast • survey • investigate • separate • categorize • classify • organize</td>
</tr>
<tr>
<td>SYNTHESIS (creating new)</td>
<td>put ideas together into a new or unique product or plan</td>
<td>discusses generalizes relates contrasts</td>
<td>• create • invent • compose • construct • design • modify • imagine • produce • propose • what if...</td>
</tr>
<tr>
<td>EVALUATION (judging)</td>
<td>judge the value of material or ideas on the basis of set standards or criteria</td>
<td>judges disputes forms opinions debates</td>
<td>• judge • decide/select/justify • evaluate • critique • debate • verify • recommend • assess</td>
</tr>
</tbody>
</table>
REFERENCES


Hirsch, Glenn. Helping students overcome the effects of difficult learning histories. JOURNAL OF DEVELOPMENTAL EDUCATION, 18, PP. 10-16.


