

## 4. TEACHING AND LEARNING ASPECTS

Chairmen: Prof. N.-H. Areskog (Sweden); Prof. D. Taner (Turkey)

### Peer Teaching in Social Medicine Education

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#### Abstract

A description will be given of a small, peer group teaching educational method. In this method, students are given responsibility in presenting subject matter to other students, and in leading a group discussion. The method was introduced to respond to a negative evaluation of the existing course. According to an evaluation, the new method met with appreciation among both students and teachers. Some theoretical issues on the peer teaching method will also be discussed.

#### 1. Introduction

Have you ever had the experience that after your efforts in carefully preparing a series of small group discussions, students don't seem to be interested? And are you left with a puzzled and uncomfortable feeling that you did something wrong, but you're not sure what?

The following year you prepare your lessons even better: you look for interesting examples to illustrate your subject matter, you write a compelling syllabus, you even invite experts to illuminate highlights of your main topic. Yet many students just don't get excited. You then give them detailed reading assignments for the next session to stimulate deeper discussions. You find, though, that it doesn't help; some have indeed read the material but many have not. They are adults so you don't want to send them away, but you feel instead that to get the discussion going, some explanation of the subject matter is needed. During your monologue the lazy students stare at you and the virtuous students get bored and decide by themselves that there is no need to prepare for the lessons any more. You thus end up giving lectures, not understanding why students these days seem so uninterested in everything, and hope that next year's group will be more like the way students used to be.

Now let's analyse what's gone wrong here. What really seems to be happening is that the more energy the teacher spends in the didactical structure of the session, the less energy the students invest in studying.

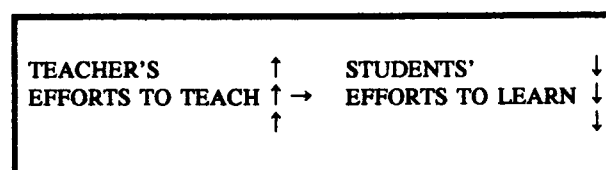


Figure 1:

It seems as if students get spoiled when the presentation of the material is didactically perfect. The ironic result is that the teacher, who ends up spending so much time perfecting the course, has never before mastered the course content so well. But his/her aim was to get the students to master the subject.

What you really want is for the students to start doing what the teacher is currently doing. And what the teacher does is, in itself, not important, as long as it encourages the students to study.

The teacher should therefore not be an excellent speaker or writer, but an excellent manager of student learning. She/he should get the students to work. Compare the teacher with a business

manager. The manager doesn't get the employees to work by doing the work for them, but by getting them motivated to do the work.

## 2. Peer Teaching

Problems as described above were faced in a third year course of Social Medicine at the University of Amsterdam. The course had the following characteristics:

- \* 4 sessions of 2.5 hours each. Topics:
  - Health law and medical ethics
  - Occupational medicine
  - Social security
  - Intramural patient care
- \* 10 hours of (planned) individual study
- \* compulsory attendance, no examination
- \* in total 18 groups and 14 teachers involved

Both students and teachers were generally dissatisfied with the course. The main complaints were:

### STUDENTS:

- \* quality of the session depends heavily on the particular teacher
- \* discussions do not get started
- \* subject matter seems to be a repetition of prior topics
  - students wish to be able to change groups to have the "best" teacher

### TEACHERS:

- \* students do not prepare the reading material

- \* students are not motivated by the subject matter
- \* students do not become actively involved in the discussions.

It was decided to radically change the structure of the course. Characteristics of the new course are as follows:

- \* students bear the major responsibility for the sessions, teachers coach students in explaining subject matter to their peers
- \* minimal knowledge transfer by teachers
- \* learning goals to be reached without examination
- \* learning goals only generally formulated.

To achieve these characteristics a peer teaching format was chosen. Students themselves were given responsibility to dig into the subject matter and to present the highlights of each of the four main topics to the other students. The following set-up was chosen:

- \* 18 groups of 12 students each
- \* four sessions of 2.5 hours
- \* each group divided into four peer teacher teams
- \* each team responsible for one session
- \* each team assigned one of 14 teachers
- \* each session consists of:
  - presentation by the peer teacher team
  - discussion, guided by the peer teacher team
  - (feedback/reflection from teacher)

Visually, the following format was achieved:

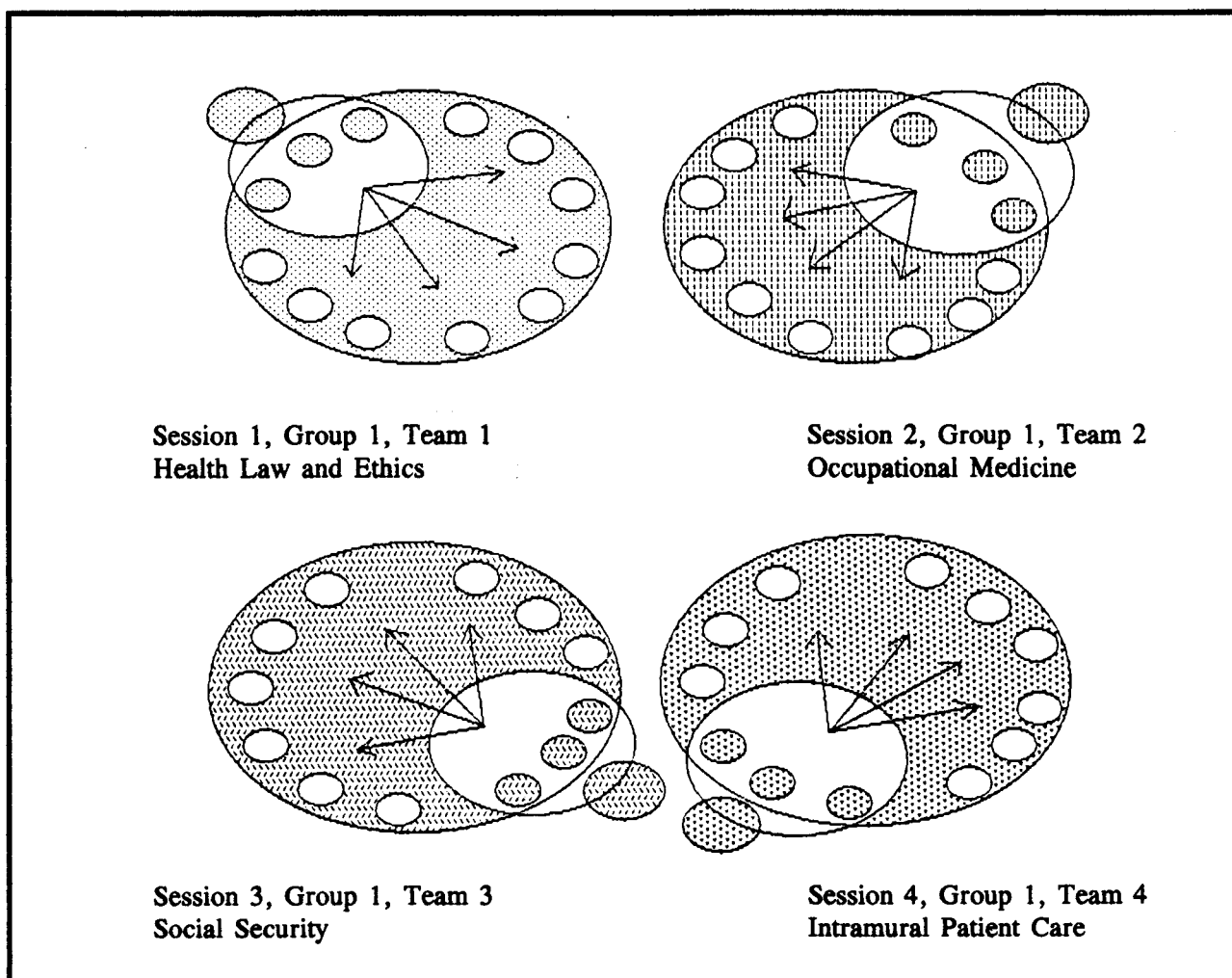


Figure 2

The peer teacher teams were not provided with a comprehensive reading source. Instead, all students were given a study guide containing the following:

- \* a general outline of the course and a description of the tasks for the peer teacher teams
- \* tips for preparing a session and leading a discussion per session:
  - title of the topic
  - introduction of the topic (1 page)
  - minimum list of items that should be discussed during the session (1 page)
  - list of relevant references

The assigned teacher was to be available in the preparation period for the session. At least once (two weeks before the presentation), preparations were to be discussed with the teacher. If a team wished to address a topic different from the ones suggested in the study guide, consent of the assigned teacher was necessary and was

given as long as the presented topic would fit in the main theme of the session.

During the presentation the teachers were present as "expert listeners"; they were asked to give feedback at the end of the session.

The teacher's tasks can be summarized as follows:

- \* preparing the study guide
- \* coaching peer teacher teams as much as necessary
- \* during the session: listening to the presentation and discussion
- \* at the end of the session: giving a reflection on the topic

### 3. Evaluation

After the first implementation, a detailed questionnaire was sent to all the students and involved teachers. The results were generally positive (Ten Cate & Wendte, 1988). There is unfortunately not enough space to show all the

results, but a general overview can be seen in the following diagram:

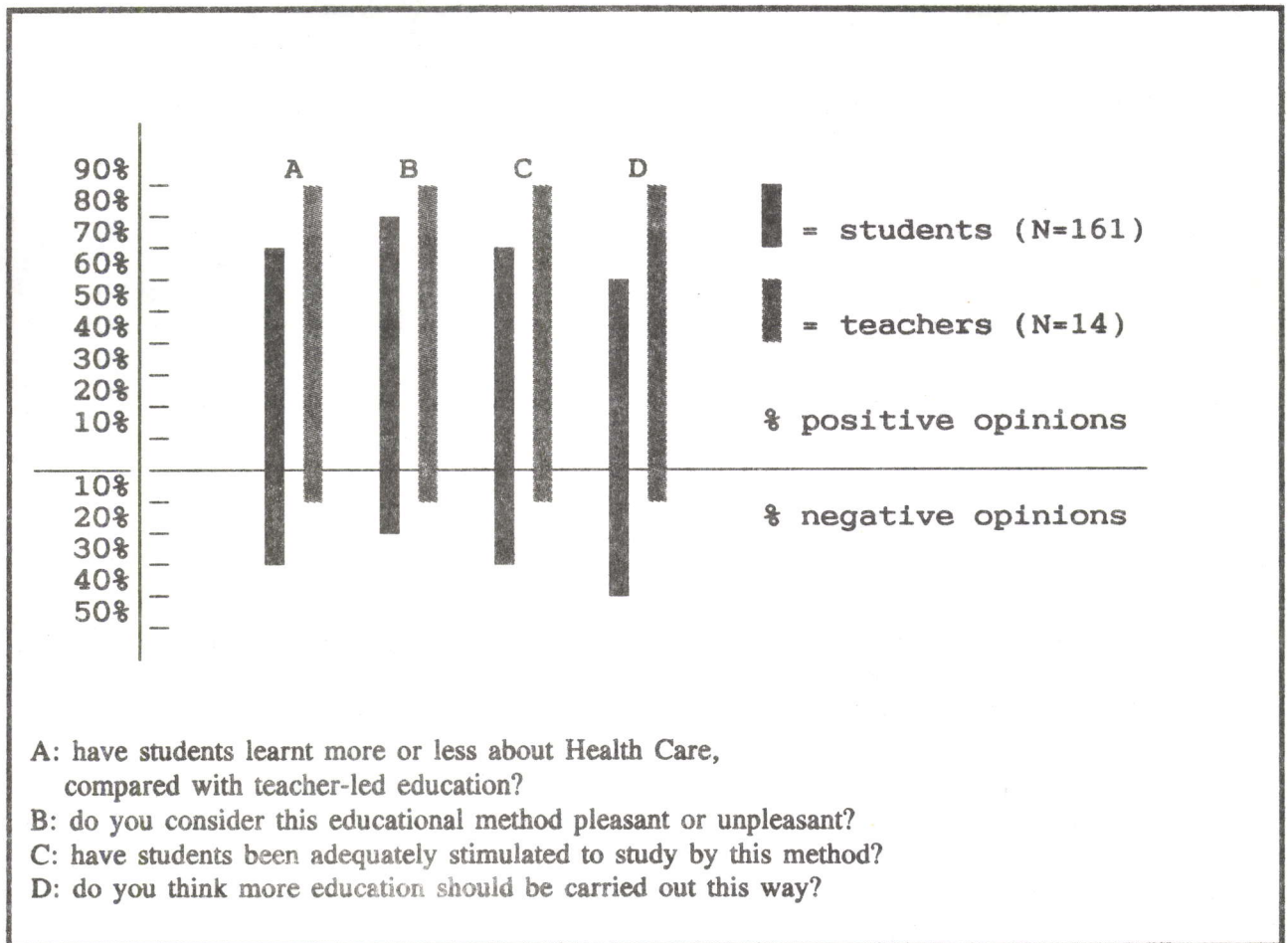


Figure 3.

#### 4. Discussion

This contribution has so far mainly focussed on the practical implementation of a peer teaching format. More fundamental questions may be raised, however.

i) Why is peer teaching especially beneficial to those students who teach others?

Educational research has learnt that teaching others is a powerful learning tool. This might be due both to the psychology of studying the material (with the intention to explain orally the topics to others, instead of producing it on an examination). The theoretical notion behind this is that the relative freedom the students have in setting their own learning goals (ie. the process of deciding which topics are important enough to explain to others) is beneficial to learning. Another explanation bears to the rehearsal of the material aloud during the presentation of the group session.

ii) Isn't being taught by a peer less effective than being taught by a teacher?

One might suppose that students who listen to the peer teacher presentation and engage in the discussion as non-peer teachers might not benefit from replacing the real teacher by students. However, randomly controlled experimental research that has been done in this field indicates that students learn no less from a well-prepared peer student than from a teacher.

iii) Who bears responsibility for the course in a peer teaching format?

As long as peer teaching is part of the regular curriculum, the teaching staff should have and keep full responsibility for the course. This should be realized by carefully formulating the framework of educational goals within which the peer teaching must take place and by the monitoring of what students are doing. Although

much freedom can be given to students, the final responsibility should never be given to the students.

iv) Is peer teaching a solution to budgetary cuts?

Budgetary cuts should never be the primary motive of any educational innovation. Peer teaching does not mean that the regular teaching load is shifted to the students. The teaching load is, however, changed from the preparing and executing of a monologue to carefully formulating learning goals, composing a list of literature sources, organizing the course and guiding students. These activities may not take less time for the teacher than simply teaching.

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