

*L e a r n i n g   C o o p e r a t i v e   L e a r n i n g   V i a*

# **Cooperative Learning**

**A Sourcebook of Lesson Plans for  
Teacher Education on  
Cooperative Learning**

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# SUMMARY

This book provides lesson plans and readings for educating pre-service and in-service teachers on cooperative learning. In cooperative learning, students work together to help each other learn. The unique feature of this book is that in each of the 19 lessons, teachers learn more about cooperative learning by *taking part in cooperative activities* which have various aspects of cooperative learning as their content. Thus, the medium and the message are one.

The lessons in the book are relevant to all teachers, regardless of subject area or the age of their students. Topics covered in the lessons include:

- Components of Cooperative Learning
- Cooperative Learning Techniques
- Theory and Research on Cooperative Learning
- Pros and Cons of Cooperative Learning
- Teaching Collaborative Skills
- Cooperative Learning and Assessment

- Cooperative Learning and Computers
- Cooperation among Teachers
- Constructing Lessons Using Cooperative Learning

## THE BOOK HAS TWO SECTIONS.

1. The introduction includes:
  - Brief discussion of approaches to teacher education in cooperative learning and our rationale for the approach used in this book.
  - Explanation of the features of each of the book's nineteen lessons.
2. Each of the nineteen lessons, which form the main section of the book, is divided into two parts:
  - A lesson plan describing one way of teaching the lesson, including cooperative learning techniques.
  - For almost all lessons, one or more readings which provide information on key concepts.



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# FOREWORD

**Note:** *Below each of the authors recounts some of their experiences with cooperative learning.*

I was motivated to try cooperative learning out of a long-standing frustration with the traditional “talk and chalk, sage on a stage” style of teaching. The turning point for me came when I was teaching psychology, sociology, and study skills to large classes of Malay students on the Malaysia campus of Indiana University, a U.S. university.

I found that in class my students did not want to ask or answer questions, express personal reactions, or even laugh at my most cherished jokes. What they did want, however, was to discuss course material with me in my office and with groups of friends outside of class. Indeed, I discovered that they did all their non-classroom studying in such small groups.

To capitalize on my students’ preference for learning collaboratively, I introduced a variety of cooperative learning activities during classes meetings and after class. To my, and their, delight, students became truly engaged with figuring out the course material and motivated to work on complex assignments.

At the University of Victoria, I use many applications of cooperative learning in my courses on psychology, education, and communication studies. Besides creating conditions for active learning, the participatory nature of cooperative learning makes it well-suited to situations, such as mine, involving cultural diver-

sity among students and between students and lecturers.

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In my years as a secondary school science teacher in Malaysia, I frequently used group activities, especially during laboratory classes. However, the groups did not always work well together, and I wondered why. When I was doing my doctoral study in the U.S. in the mid-1980’s, I began to read about cooperative learning. I then realized that there was so much more I could have done to make group learning more meaningful, more enjoyable, and more effective.

In my current position as associate professor in the Faculty of Educational Studies at University Pertanian, Malaysia, I have carried out several research studies to investigate the impact of cooperative learning in Malaysian classrooms. Encouraged by the results, I have incorporated elements of cooperative learning in the design of computer courseware I developed for secondary schools. My most recent effort is an environmental education courseware which promotes thinking skills in a cooperative learning setting.

I also use cooperative learning in my courses for pre-service teachers. Most of them have had little or no experience with cooperative learning in primary and secondary school or in their other university courses. At the end of my courses, I ask if they will use cooperative learn-

## Introduction

By using these lessons, it is hoped that course members will:

- become familiar with various definitions of cooperative learning.
- understand and be able to give examples of key concepts from cooperative learning, such as, positive interdependence, individual accountability, heterogeneous grouping, teaching collaborative skills, processing group interaction, face-to-face interaction, and multiple-ability tasks.
- be acquainted with the research on cooperative learning and some of the explanations given for the findings from this research.
- consider various theories of learning and philosophies of education in relation to cooperative learning and to their own views.
- weigh the strengths and weaknesses of cooperative learning.
- anticipate problems which may arise in the use of cooperative learning and suggest solutions.
- have experience with a wide range of cooperative learning techniques.
- consider how cooperative learning principles apply to social interaction outside the classroom.
- reflect on ways to facilitate cooperation among teachers.
- plan and teach a lesson involving cooperative learning.
- become familiar with a variety of resources for continued learning about cooperative learning.

### FEATURES OF EACH LESSON

Every lesson in this book has standard features: lesson number and title, objectives, cooperative learning technique(s), collaborative skill, resources, time, suggested procedure, and sponge activity. Each of these features is briefly discussed below.

**Note:** *Throughout the book, the person(s) leading the course/workshop is referred to as the “instructor,” with everyone else referred to as “course members.”*

### Lesson Number and Title

Most users of this book will have time to utilize only some of the lessons. This is fine. Further, it is not necessary to do the lessons in the order they appear. However, there is a logic to the order, with principles of cooperative learning specifically and education generally being presented in early lessons. Thus, if you are doing a later lesson, you might wish to consider what lessons would supply background. Lesson 2 is particularly recommended, as it provides a broad overview of cooperative learning principles.

### Objectives

Most of the objectives for the lessons are of two types:

1. acquainting course members with concepts;
2. encouraging them to consider and apply the concepts to their own beliefs and teaching situations.

Reading the objectives may give you a better idea about whether you would wish to include a particular lesson in your workshop/course.

### Cooperative Learning Technique(s)

There are many, many different cooperative learning techniques, and each technique can be modified by teachers and students to create new versions. Further, educators can use their knowledge of cooperative learning principles to create their own entirely new techniques.

About 20 cooperative learning techniques are used in these lessons. Near the end of most lessons, course members are encouraged to

think about how the technique(s) used in that lesson could be used in their own teaching context. Drawings illustrate some of the techniques, although the drawings do not always show all the steps in a technique. Please don't feel that you've got to do the technique the way this book says to do it.

Many of the techniques are utilized only once. This is not recommended for classroom teaching. The advantage of this approach with this book is that course members are introduced to many different techniques, but the disadvantages are that they do not learn any technique well, and time and effort will have to be used to explain each new technique and for course members to adjust to it. With their own students, course members should take a different approach and introduce techniques more gradually, giving students several opportunities to gain experience with each new technique.

### **Collaborative Skill**

Many experts on cooperative learning believe that explicit instruction on how to collaborate will improve students' ability to work together. For this reason, these experts advocate that an appropriate collaborative skill be focused on every lesson. For every lesson in this book, a collaborative skill is suggested upon which you may want to focus. As with the cooperative learning techniques, almost every lesson focuses on a different skill. Again, this is done to introduce course members to a wide variety of collaborative skills. In a regular classroom, teachers would want to focus on the same skill over a longer period of time and to recycle skills during the year.

You may feel that it is a waste of time to have course members work on improving their collaborative skills. Perhaps you are right, but

please consider these two points. One, including the use of collaborative skills in the lessons will help course members appreciate what their students will experience if they decide to explicitly teach collaborative skills. Two, there are many adults who could benefit from practice in these skills. If you do decide to include a collaborative skills focus, you might want to have a look at the lesson Teaching Collaborative Skills (Lesson 10).

### **Resources**

The term "resources" usually refers to the one or more readings which come at the end of most of the lessons. Because some of the people using these lessons are in places where libraries, book stores, and budgets are not large, all the necessary readings and other handouts have been included. To make the book less expensive, our own works or our summaries of other's works are usually used instead of those for which payment would have been required. References are also included in the back of the book for those with access to outside sources. In the case of small publishers, addresses are included to facilitate the process.

For a few lessons, other resources will be needed. These include chips (possibly made from cardboard), index cards (or some substitute), and thick paper (such as construction paper).

### **Time**

How long a lesson takes will vary greatly according to the course members' interests and backgrounds, as well as your own. Thus, please treat the time given for each lesson as a rough estimate. You can increase or decrease this by adding or subtracting steps from the procedure. Also, sometimes course members will be able to do part of a lesson, e.g., the reading, at home.

### **Suggested Procedure**

There are many variations on how to lead any cooperative learning lesson. Please feel free to adapt these lessons in any way you see fit. It's the principles of cooperative learning not the specific procedures which are key. As to the procedures, bend them, break them, rename them, twist them into unrecognizable shapes, or throw them out and start over. Great! But do keep the principles, your own purposes, your course members, and their students in mind as you go about your surgery, reconstruction, and destruction. Further, course members will also come up with their own adaptations. Before deciding that these adaptations are wrong and the result of inability or unwillingness to follow directions, consider whether they might have merit.

For some of the steps in the procedures when course members are working in groups, time limits are given. There are three reasons for this: to encourage course members to stay on task, to reduce the problem of some groups finishing far before others, and to help the class keep to a schedule. One way to encourage groups to pay attention to the time limit is to have each group appoint one member as time keeper, responsible for keeping track of the time and informing their group when there is a minute left and then again when time is up.

While important, these time limits should be viewed as flexible. If groups are working well and need more time, the limit can be extended. Conversely, if all or most groups have finished before the time limit, that part of the lesson can end early.

We recommend that you establish a quiet signal that is used to get course members' attention when they are working in groups. Our favorite is to raise one hand. When course members see this, they are to raise a hand, bring their discussion to a close, and face the instructor. Other quiet signals include whistles, bells, and clapping hands.

The suggested Procedure section is the main place where you will find Notes in italics. These Notes provide you, the instructor, with optional information which might help you. If things are still not clear, you may wish to ask colleagues or refer to the references. We tried to strike a balance between being too detailed and lengthy, on one hand, and being too concise and incomplete, on the other.

### **Sponge Activity(s)**

One problem that can arise in cooperative learning lessons is that some groups or group members finish before others. Sometimes this is because the early finishers have not really done their task well. We can check this by asking them to show and explain to us what they have done.

When a person or group has genuinely finished before others, we can use sponge activities to "soak up" the extra time, just like a sponge soaks up water. These activities should be enrichment activities. As the instructor, you can make suggestions, as we have done after most Suggested Procedure sections, or you can let course members think of their own.