## Positive Interdependence

Group members must realize they need each other in order to achieve success.

Positive interdependence can be facilitated in many ways.

## 1. Challenging problems

To prevent independent work, any task or problem should be too difficult or consume too much time for a single student. Thus, group problems or tasks are necessarily different from those given to individuals. Problems with unique solutions or that require divergent thinking are preferable.

In the business world, groups are formed to take advantage of different background knowledge and skills. This may be less possible in the classroom, unless you have a mix of skills such as writing, mathematics, graphics, and computer skills.

## 2. Mutual goals

Students must be placed in a situation with a common goal so they sink or swim together and there is no advantage in one person abandoning the others.

## 3. Joint rewards

An individual bonus can be awarded to each member of the group if all members of group succeed in achieving a predetermined level of performance. Another method is to give a single grade to all members of the group for the group effort.

## 4. Restricted or shared resources

Students can be made to collaborate if they are restricted by the resources made available. This happens naturally with limited quantities of expensive laboratory equipment. It can also be done deliberately by giving just a single handout to the group or by giving different information to different group members of the group members.

## 5. Designated roles

Making different people responsible for singular tasks or aspects of the problem prevents one student from doing everything. Students learn to take on responsibility and how to depend on others.

## 6. Context-rich problems

The main idea of the problem can be embedded in a complex story line, featuring the reader as a problem-solver. These are preferable to more traditional, bare-bones problems that have been stripped of all but the most essential elements. The "story" approach requires students learn what to do by discussing problem details.

## 7. Peer editing

Group members edit or correct the work of other group members before it is handed in.

## 8. Jigsaw

Each member of the group is assigned a different task and is required to teach every other member what he or she has learned. Eventually, every member of the group is responsible for knowing all the material.

