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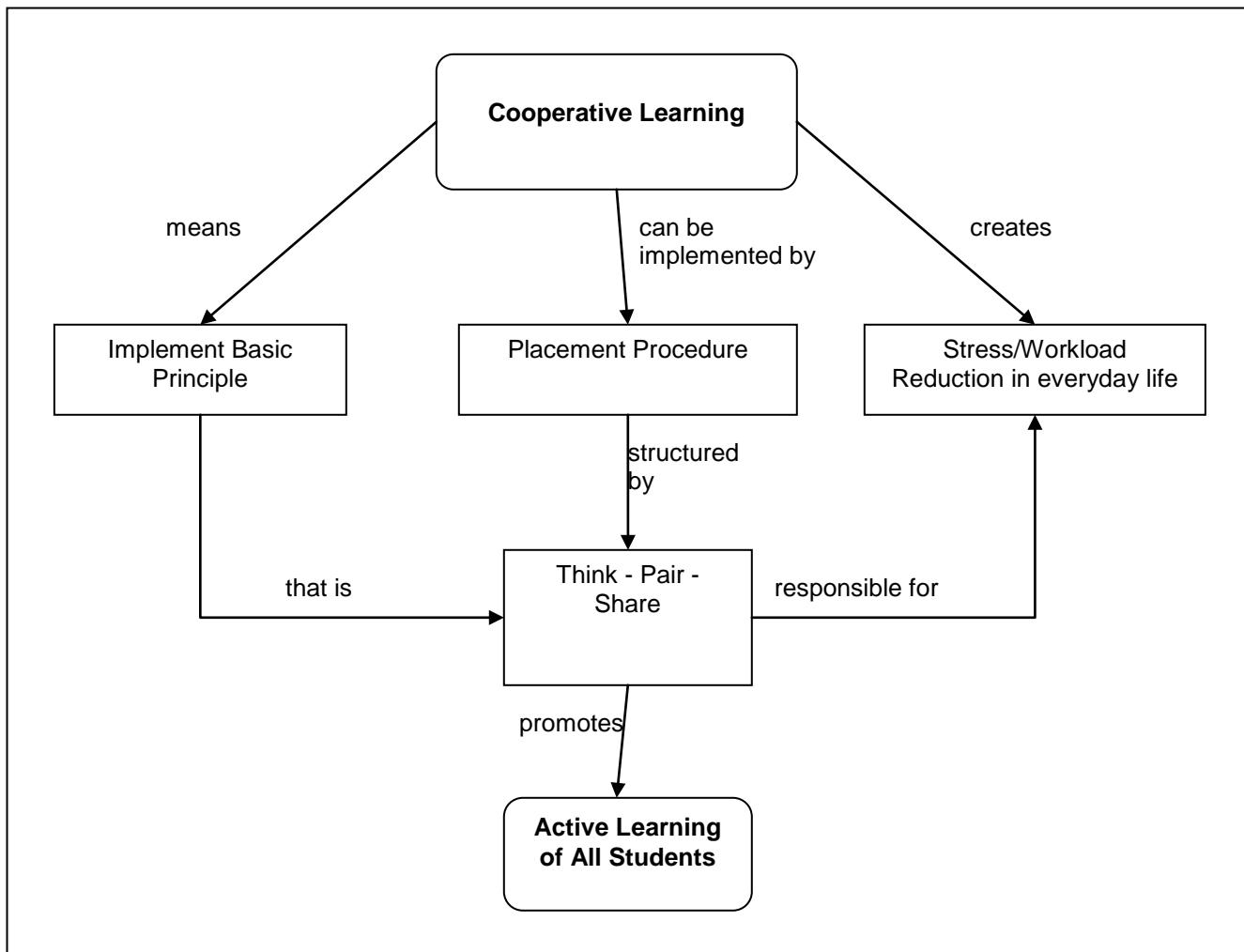
Successful Teaching

(Erfolgreich unterrichten durch Kooperatives Lernen (Bd. 1), nds-Verlag, Essen 2006)

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Übersetzung des 1. Kapitels/Translation Chapter 1

Cooperative Learning Main Basics



Getting Started With Cooperative Learning

Slightly modifying your teaching, enhancing your repertoire and individual teaching routines – that is a constant challenge for every teacher. Because teaching groups of 30 totally different young people every day certainly is one of the most sophisticated and demanding tasks - but also one of the most important of all professions.

Moreover, brain research findings and pedagogical psychology research results have shown that learning can no longer be understood as students simply reproducing facts and knowledge chosen and presented by the teacher. In fact every single student needs to process individually and actively the information presented which then results in integrating it in his/her individual knowledge structure (schema). Therefore learning is always a process in which students build knowledge individually. Learning in this sense is particularly successful when students:

- understand what they are doing – with regard to teaching issues and objects as well as their own activities,
- link new knowledge to individual pre-knowledge,
- share and discuss their knowledge and findings with others,
- feel safe and accepted in their learning environment,
- consciously perceive and reflect their own learning process,
- develop and experience positive self-efficacy beliefs in their social contexts.

Cooperative Learning gives an answer to all these goals. It offers a variety of teaching techniques for all teachers – easy to understand and apply – that are augmenting your teaching to make students' learning more sustainable and efficient.

In this chapter you will....

- learn about the main principles and fundamental structures of Cooperative Learning.
- find that conventional individual learning techniques are a core element of Cooperative Learning
- realize the significance of learning tasks for Cooperative Learning
- analyze more or less successful learning instructions and assignments and reflect upon their significance for Cooperative Learning
- learn how you can promote active intrinsic learning processes in every student
- realize the significance of instruction, construction and co-construction for engaging students as active learners
- learn a simple structure of using active instructional methods to increase student participation in your classroom
- learn about several ideas which you can put into practice tomorrow – without any additional preparation

1.1 Promoting Student Participation

In a traditional classroom we time and again can observe how only a few students take part in the classroom activities and discussions and how only a few answer to questions asked by the teacher. Many students react rather passively to the issues on offer and can only respond inadequately to the teacher's questions. Our observations as well as personal experience show similar results for conventional group work: A few students get an unfair share of the group's tasks actually to be performed by all group members – while others go freeloading.

This common real-life problem of insufficient participation will probably, be very well-known to you: Only a part of the students participate in the learning process. Besides issues of motivation, personal interests and performance, probably the instructional structure of the lesson might not encourage or request students to join in the actual thinking processes.

Considering these facts we would like to invite you to reflect upon the basics of active learning techniques in your classroom and to learn about some possible solutions for the above mentioned problems.

Invitation to Think

Below you will find several learning tasks, questions and assignments, occasionally used by teachers in their classrooms. They illustrate the structures resp. the sequences of instruction. As you can see the examples alternate in bold and normal print. We favour the ones in bold print (even numbers 2, 4, 6, ...), because they demand student participation and promote working on the learning issues. In comparison, the examples in normal print (odd numbers 1, 3, 5 ...) are less advisable, as they do not really invite many students to cooperate!

Please read the ten examples and try to find out, what the assignments in bold print have in common. In what way are they different from the less suitable ones in normal print?

After studying the ten examples you should be able to form a hypothesis on the question: What is characterizing the well-phrased assignments? You can then test your hypothesis by considering which of the examples within the second set of examples could lead to a high level of intrinsic activity and motivation in many students.

Tip: If you work through this book together with a colleague you can perform this exercise in team work!¹

¹ Compare Bennett, Barrie / Rolheiser, Carol: Beyond Monet. The Artful Science of Instructional Integration. Ontario [Bookation Inc., Kanada] 2001.

Compare the evenly numbered phrases to the ones in odd numbers

Remember: It is all about intrinsic student activity

1. Who can tell me what you learned in the last lesson?

2.Think for one minute and then communicate with your partner about what we found out about the use of “past perfect” in the last lesson. You have two minutes time for partner work. Afterwards I will choose someone to present.

3. You have now worked on task no. 4 for thirty minutes. From your group, who is now able to present the results of your group work to the class?

4. Please do not raise hands! Which reasons for drawing graffitis on the student´s toilets`walls can you think of? Write down your answers and then give them to your neighbour; he/she will complete them by adding their his/her ideas and comments to yours (in writing) and give them back to you. I will ask some of you about the answers in ten minutes.

5. Peter, yesterday, we discussed the phenomenon of narcolepsy! Please explain to your class-mates, what it is about. You can use your notes.

6. Each of you has 30 seconds to consider whether it makes sense to take part in this competition. All group members will quickly share their ideas afterwards, you have three minutes for that. First all express their opinion, then you can discuss. Each of you has to be prepared to present the results of his/her work to the class.

7. In the text you can find an answer to the question: “Why is the proportion of girls in AP-Courses higher (compared to the boys’ share)?” Find out what reasons there are (group work). Note down your results on overhead transparencies and let the group speaker present the results at the end!

8. Think by yourself and then write down your answer: What is the rule you should use to decide about the spelling of words with “ss” or “ß”. Compare your answers with yourneighbour’s work. In five minutes I will choose one of you to present.

9. Please remember the difference between „radius“ and „diameter“. We worked on this issue together last week.

10. “People with problems are lucky. Coping with challenges will make you grow stronger.” Please reflect on this and decide if you agree to this statement. Then please choose a partner (within two minutes) and discuss. Choose another pair of students after four minutes and discuss your point of view in the group. Each of you must be able to present a reasoned opinion whithin ten minutes.

Please list here: What do the examples in bold print have in common:

If you work through this book with a partner: Share your results.

Apply your New Knowledge!

Probably you identified how a successful question or instruction should be verbalized. Please check the following examples: Which of them will lead to a high level of intrinsic activity and which phrases are less likely to make students participate?

A Find out if the statements on p.45 in your book are examples for probability or for absolute resp. relative frequency. First, think by yourself and write down your solution. After ten minutes discuss it with your partner. In 20 minutes I will choose one student for each statement from A) to F) to present the solution

B. Please work in groups and find out the difference between a term and a theory by analyzing the text. If you have difficulties with the text, you can raise your hand. I am walking around the classroom and will be coming to your desk. When I notice that the group work is finished, we will discuss the solutions in class.

C. Find out on your own how you can solve the exponential equation and decide what you consider the most difficult step. Write down your observations. Discuss with your partner after five minutes. Write down your thoughts (with your names) and give the note to me after 10 minutes!

D. Clean, cold mountain streams are extremely oxygen rich. Why is that? Remember, that we discussed this matter last lesson and that oral performance will contribute to your grades.

E. Two or three of you have selected the same book and read it . Each of you has written a summary and a small review at home. Those who have read the same book meet in a group now for this and the following lesson in order to prepare a presentation of your book from next week on. I will appoint one student of each group to present your work to the class.

F. Please raise hands. How did the artist succeed to express the dramatic tension caused by the forthcoming wedding? [The teacher waits for an instant and then asks a student].

G. When you work on the task which I will soon give to you, remember what we call a “proportional allocation”. Then work on exercise no. 1 in your book on page 127. Write down the solutions and the diagram on the transparencies which I will hand out. I will walk around the class and watch how you are doing. When finished, some of the groups will present their solutions. Please decide, who from your group can present the result at the end. And remember, it is all about “proportional allocations”.

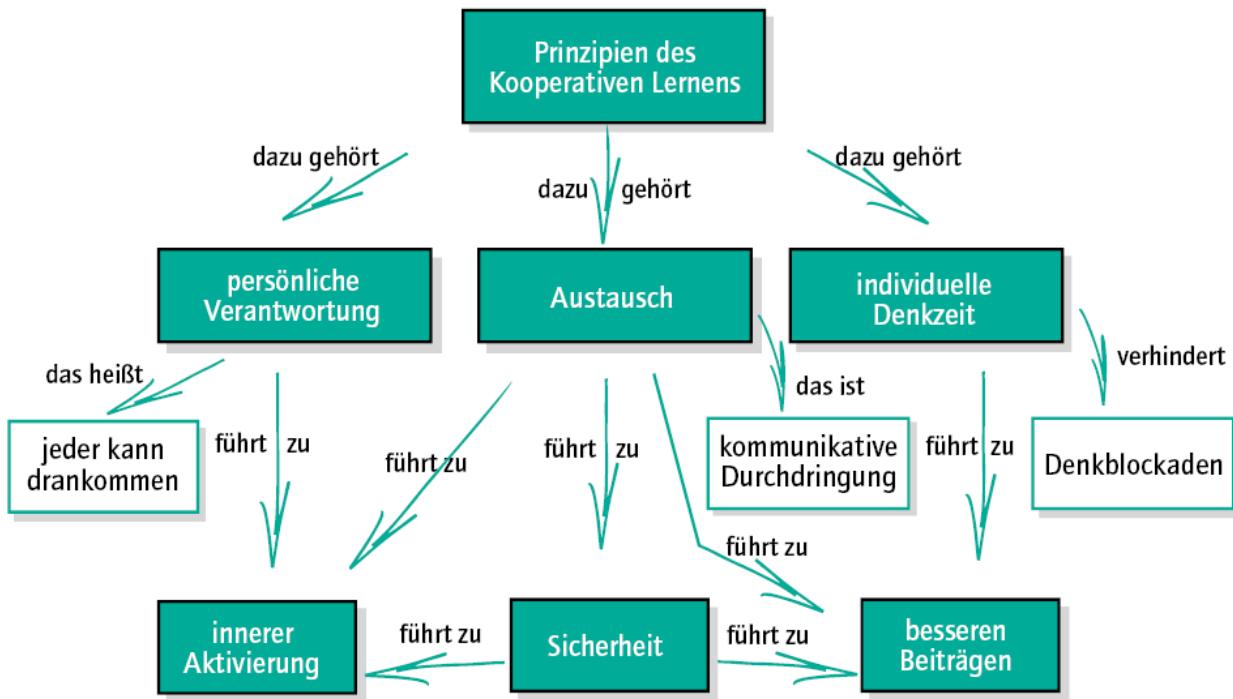
H. You know how an acute-angled, obtuse-angled and a right-angled triangle are defined. And I have just explained the difference between an isosceles and an equilateral triangle. Now work on exercise no. 1 on page 75 in your book. There are nine different triangles. Match them with the ones in the table. Start to work individually for five minutes. I will then give you a signal and you can start presenting your solutions in the group. The tallest student in every group starts with the first triangle, then you will go clockwise to present solutions 1 to 9. If you come up with different proposals talk about them and agree on the one which seems to be the most plausible. You have 10 minutes for this. After that I will call upon several students who will present the solution to the class.

Which verbalizations most likely leads to a high level of student activity?

**Please view all exercises again. How did your ideas develop?
If you work through this book with a partner or in a group: Share your ideas.¹**

¹ You will find the solutions at the end of the book.

Prinzipien des Kooperativen Lernens



Prinzipien des Kooperativen Lernen: Principles of Cooperative Learning

Dazu gehört

Persönliche Verantwortung

Austausch

Individuelle Denkzeit

das heißt

jeder kann drankommen

führt zu

verhindert

kommunikative Durchdringung

Denkblockaden

innere Aktivierung

Sicherheit

Bessere Beiträge

including

Personal Responsibility/Individual Accountability

Face to Face Interaction

Individual Thinking Time

that means

everybody can be asked to present

leads to

prevents

Communicative Understanding (Students explain, discuss, and teach what they know to classmates)

Think Impairment

Intrinsic Activation

Safety

Improved Performance

The carefully worded and explicit instructions (regarding tasks, learning strategies and exercises) on the previous page illustrate the key principles of Cooperative Learning.

Think Time:

All learning processes include think time. A specific amount of time is allocated for a period to think individually.

Face to Face Interaction:

Students are always given the opportunity to share their ideas, before they (individually or as a group) present their solutions and results to their classmates.

Personal Responsibility/Individual Accountability:

Each Student must be prepared to present their results at all times. None of them can withdraw and rest, because they always must expect to be asked for a contribution. When they start to work they do not know who from their group will be the one called on to present their results to the class.

These three principles constitute the core of Cooperative Learning, since they have a fundamental impact on the learning and teaching process:

Internal Activation and Participation

Well-phrased learning instructions have the potential to promote active learning and thinking in every student. This leads to increased participation of all students.

Safety and anxiety reduction

When asked to answer without preparation, students tend to be distressed. Very often this leads to impairment of their cognitive functions. When Cooperative Learning methods are used, every student knows how much time he/she has to prepare the answer. They need not be afraid to be asked while thinking. Interaction with others makes them feel secure and encourages students to participate.

Quality of contributions

Face to Face Interaction in teams results in improved student achievements and better performance as they will facilitate and correct each other, get time to think individually and can refine their own thoughts by reflecting on those of their classmates.

Basically these are rather simple principles which may already have guided your daily teaching routine - even if you have not read or heard about them before. For Cooperative Learning, however, which aims at activating as many students as possible – in classrooms where they all engage in thinking processes and tasks to reach their learning goals – these principles are fundamental ideas: There is no lesson without thinking time, no lesson without pairing and no lesson without personal responsibility. What this kind of tuition could look like will be described in the next section and will be gradually developed throughout the book.

1.2 Cooperative Learning requires individual Learning!

The above mentioned basic principles of Cooperative Learning are easy to phrase. To implement them in your classroom is another story. But you will find it less complicated as it may seem at first sight.

Remember – the main goal is to get students actively involved and engaged to reach their learning goals. That is why we focus on the instructional structure: How should the learning process be structured to enable and to require as many students as possible to participate actively in the actual thinking process?

An initial, but fundamental answer can be derived from the very simple and efficient tuition principle “Think – Pair-Share”.¹ This three-step process is essential for Cooperative Learning. It could be regarded as the foundation of Cooperative Learning.

First, every student is given time to think individually about a task or a question. The next step is to work in pairs or in a small group and discuss their responses (based on results from the preceding Think-Phase). At this stage students can help each other to refine, complete and correct their answers and elaborate on their understanding. In the third phase the responses are shared with the whole class. The group or a single student present the results, to demonstrate the learning progress to their classmates and the teacher.

No matter what cooperative strategy or teaching example we introduce in this book, you will find this basic principle again and again. In the more complex cooperative strategies it will be varied in many ways. But one rule applies to all of them: No Cooperation without preceding Individual Think Time.

¹ According to our knowledge it was Frank Lyman who initially developed this principle. He is a professor at the University of Maryland, Teacher Education Center. Spencer Kagan has picked up the principle. (cp. Kagan 1992, p. 11:2). A similar conception is presented by Heinz Klippert, who emphasizes the advantage of alternating sequences of individual work, pair work, group work and plenary activity as often as possible. (cp. Klippert 2000, p. 186f.).

Link

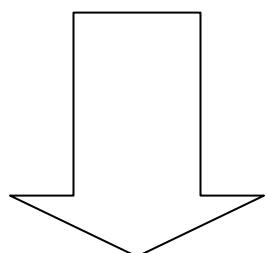
Please read also chapter 8 „How Cooperative Learning succeeds“. You will find there the conditions which make Cooperative Learning successful.

The basic principles of Cooperative Learning

Think Pair Share

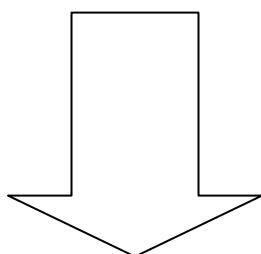
1. Think

Students work individually



2. Pair

Students compare their responses, discuss different perspectives etc. in pairs or in small groups.



3. Share

Results and Answers are shared, discussed, refined, corrected, etc.



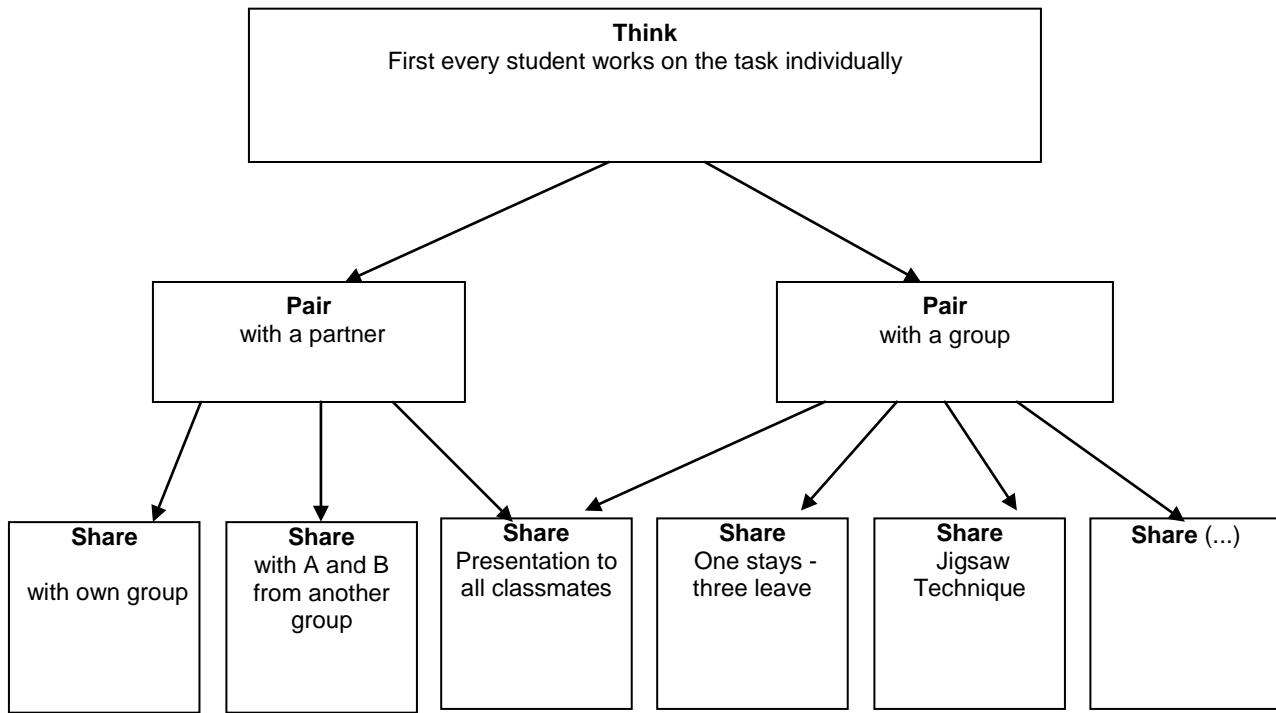
What makes this simple strategy work so well

- First it must be stated that this principle creates safety, safety for the weaker or more introvert students who hesitate to participate in classroom talks. They get the opportunity to reflect in a defined routine and can support each other during *Pair and Share Time*.
- Initially every student is left alone with the task or exercise. Confronted with the task he has to take up the challenge. He cannot rely on the hope that only students who volunteer to answer get called upon. This promotes individual responsibility for the learning result.
- The cognitive analysis and understanding of learning issues is deepened by communication processes, as we know from current learning psychology. Consequently, *pairing* has an immediate effect on learning results.
- Cooperative Teaching can only be successful if there is the time and room for individual learning: Only when students have the opportunity to work individually on a question, a text or an arithmetic problem, they can actively and responsibly contribute to successful Cooperative Learning.
- The application of the exchange process enhances the communication skills of the students. Those needing more information will listen attentively. They will ask questions when they do not understand, on the other hand their counterparts have to give detailed reports, offer clarifying explanations and share information. In summary: there will be positive communication and more mutual respect
- Everybody has a desire for communication. Often at school there is not enough time and room for this need. Not only a few disciplinary problems result from this fact. Cooperative Learning more or less immanently promotes communication and reduces disciplinary problems.
- Coöperational Learning strategies achieve an increase in student participation thus enhancing satisfaction and motivation, in both teachers and students. This positively impacts on further lessons.

Think – Pair – Share

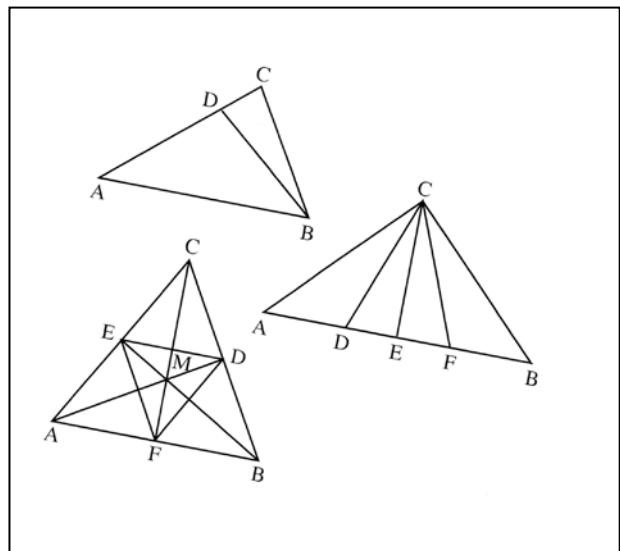
A universal strategy for Coöperational Learning

Sometimes it is said that this strategy fits perfectly in certain sequences of tuition – e.g. to make a lecture more entertaining. This statement does not grasp the conceptual meaning of the structure. In our opinion, lessons that intend to promote students' thinking activities and cooperation between them should always be organized along these three steps. The process can structure a sequence of several hours or be an element at the beginning of a lesson in order to draw the attention of all students to the teaching subject.



A Classroom Visit

Mathematics – Differentiating Triangles



In a German gymnasium's (grammar school) 7th form students are supposed to learn about triangles, or more specifically, how to tell an isosceles triangle from an equilateral one. The teacher uses the well-established class book which offers an illustrative and didactically organized introduction. She has decided to explain the basic information herself and to use cooperative techniques for deepening and application.

Team Building

In this mathematics lesson the students sit at their tables in groups of four as they usually do. At the beginning of the new sequence the teams were rebuilt by numbering off. The seating order is written on a sheet next to the classroom door.

Establishing transparency

The young teacher informs her students that in the following lesson they will learn an additional criterion for the differentiation of triangles.

Activating Pre-Knowledge

In the previous lesson the students learned about acute-angled, rectangular and obtuse-angled triangles. This knowledge is activated by the teacher in a first sequence of individual work. The students are assigned to find an example for the above mentioned types of triangles and to sketch them into their exercise books ,titled “We repeat triangle types”. After five minutes the students compare their sketches at their tables and discuss occurring inconsistencies. Several students begin to delete some of their sketches. Another five minutes later a few students are selected to report orally about the characteristics of all three triangle types. One student uses the chalkboard for presenting and draws an example of an obtuse-angled triangle.

Introducing a Model

In an informational sequence the teacher first introduces the isosceles triangle by a chalkboard drawing. She introduces, resp. repeats terms like axial symmetry, arms of the angle and basis. Before continuing she closes the chalkboard, and asks the students to think for a moment about the definition of an isosceles triangle. Just one minute later the students share their memories with their neighbours – for another minute. In a third step the teacher calls upon several students to present their results, resp. their memories, asking the students time and again to use the freshly introduced technical terms. The students' explanations are used as a starting point for the second demonstration by the teacher. She now draws an equilateral triangle on the left side of the chalkboard and explains it to the students. This sequence is again followed by a short period of student activity (“Think – Pair – Share”) to process the new information before the students turn to deepening their knowledge.

Giving clearly defined assignments

The deepening and application is started by an assignment which may seem familiar to you. This is assignment H, already introduced on p. 14. The teacher:

You know how an acute-angled, obtuse-angled and a right-angled triangle are defined. And I have just explained the difference between an isosceles and an equilateral triangle. Now work on exercise no. 1 on page 75 in your book. There are nine different triangles. Match them with the ones in the table. Start to work individually for five minutes. I will then give you a signal and you can start presenting your solutions in the group. The tallest student in every group starts with the first triangle, then you will go clockwise to present solutions 1 to 9. If you come up with different proposals, talk about them and agree on the one which seems to be the most plausible. You have 10 minutes for this. After that I will call upon several students who will present the solution to the class. Please think again for a moment, what you are supposed to do next!”

The teacher writes on the chalkboard
class book, page 75, no.1
Think = 5 min.
Pair-Share = 10 min.,
clockwise presentation
use a pencil

After a short “Think Time” one student is called upon to repeat the assignment and the class begins working while the teacher writes some assignment-related prompts on the chalkboard.

Practice and Apply

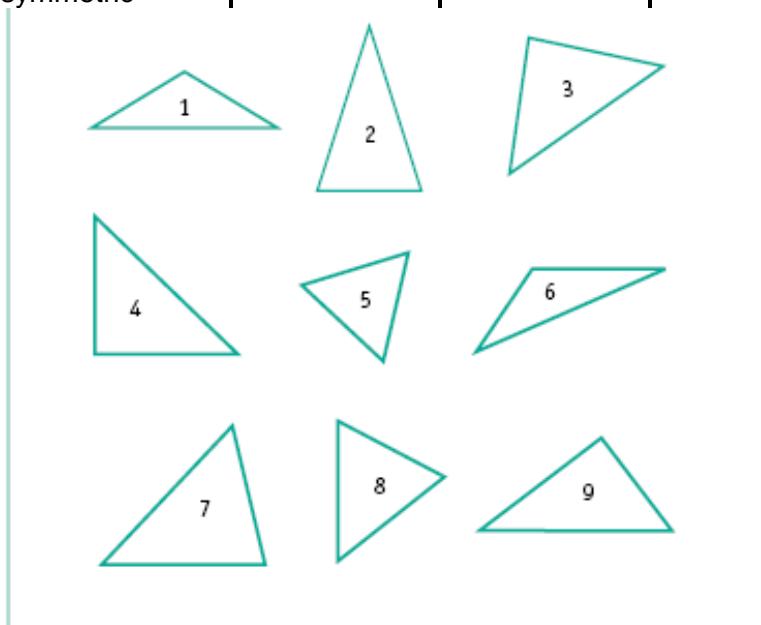
Towards the end of the individual work sequence (Think) the teacher walks through the classroom where students are obviously already familiar with Cooperative Learning. The sharp beep of a clock signalizes the end of individual work. The groups start to share their results in their groups. Two groups have to be reminded about being supposed to present their results clockwise. The young teacher seems to be very calm and concentrated. She stops at a couple of group tables and listens to the students without interfering. At the end she sits down at a table of three and follows the discussion.

Presentation and Corrective Feedback

A signal of the teacher indicates that the results are to be shared with the whole class now. Individual students are selected to present the results of the triangle exercise. They explain where to note identification numbers of the triangles in a table on the transparency. Two examples lead to a short class discussion as the presented result obviously is incorrect. At the end the teacher has registered all results in the table, so that the students can compare their results to those listed on the transparency.

Note the identification numbers of the triangles in the matching table cell in your exercise book

	acute-angled,	right-angled	obtuse-angled
equilateral			
isosceles			
not equilateral			
unsymmetric			



Self-Reflexion

Ten minutes before the end of the 90 minute lesson the teacher asks the students to analyze what they found difficult to learn and to write these difficulties, titled “Stumbling Blocks”, down in their exercise books.

Practice and Apply

Tasks no. 2 and 3 from the classbook are to be done as homework and will be shared at the beginning of the next lesson in the table group.¹

Comment

The observed lesson is actually not very sensational but nevertheless highly effective. Continually, the students are required to integrate new information presented by the teacher into their own knowledge. The guiding principle in this process is always “Think – Pair – Share” – alternating with teacher centered activities and teacher-lead class discussion. The corrective feedback sequence shows very clear that Cooperative Learning does not only mean working in groups. Cooperative Learning is more, it is combining different instructional strategies.

¹We would like to thank Sabine Brüning, Oberhausen, und Gerd Konietzko, Hagen for their help regarding subject-relating didactics.

Excursion 1

Construction, Co-Construction, Instruction

Central insights derived from Constructivism (Constructivist learning theory) are affirmed by recent brain science and neurobiology studies. Both assume that teaching contents are not transmitted from teacher to student. Students rather have to actively process knowledge and integrate the offered content into his own mental patterns, i.e. into his/her own individual knowledge network. Knowledge has to be constructed individually. Learning always is a process where students are active creators of their knowledge in which they link new facts with previous ideas and experience, leading to transformation or refinement of preexisting knowledge.

During „Think Time“, i.e., during individual work every learner is constructing meaning, stimulated by learning objects. In this phase of *Construction* pre-knowledge is linked to new knowledge.



Using constructivist terminology, thinking activities during „Share Time“ could be described as *Co-Construction*. Learners present their results to and share them with others, thus confronting their partners with their ideas. They individually compare their own constructions to those of others and occasionally they have to revise their original construction. This clearly shows: Every learning process, i.e., refinement, reconstruction and expansion of knowledge, is promoted when individuals reflect their own cognitive constructions in interaction with others.



The third phase, where the groups share their results with the class, can be described as a process of students integrating the information presented into their individual knowledge base. As soon as results differ and get debated, a new phase of co-construction is stimulated.



But what about teacher lectures, films or student presentations? This is a matter of perspective. From the presenter's view these activities are to be regarded as an *Instruction*. They introduce facts, explain an approach for a mathematical solution or the difference between main and sub-clause. From the listeners' view they can be seen as triggers for construction processes.¹

¹cp.. Tippelt, Schmidt 2005, S. 6 ff.

How can I Implement this strategy in my classroom?

Start off the very next day. Here are three suggestions which do not require any special materials nor elaborate preparation.

Starting a Lesson

Instead of: „What did we learn last lesson?“

Now: „Please think on your own for two minutes. What did you learn last lesson? No hands up, please, I will soon call on you. But before that you can share with your table partner. Not until then will I choose one of you. Has everybody understood what they are supposed to do? Arno, please repeat!“ ... All right. Now everybody work on their own. No more talking: What did you learn last lesson?“...

Working with texts:

Instead of: „Sit together in pairs and work on the text in your books on p. 122 and answer the question...“

Now: „Each of you now reads the text on page 122. After that you have two minutes to ask your neighbor about things you don't understand. Then everyone answers the question on his/her own. ... You have ten minutes for that. Share your answer with your partner; if necessary you can add to your answer. Has everybody understood what they are supposed to do? Zoe, please repeat the assignment!“ ... “Fine, now start working on your own, read your texts by yourselves.”

Learning Vocabulary

Instead of „Please read the new words up to paragraph 3.1 and memorize them. You have ten minutes time, I will check vocabulary afterwards.“

Now: „Each of you reads the words up to paragraph 3.1 and memorizes them. You get five minutes time for that. Afterwards you can check on them in turns. Student A will start to ask for two minutes. When I give a sign you will change: A has to answer then and B will check vocabulary. After that you will take turns again. At the end I will call upon several students. Have you all understood how you are supposed to work? Gökhan, please repeat the assignment!“ ... “Fine, now start working on your own, everybody memorize the vocabulary alone ...”

Link

Read also chapter 6.2 regarding the issue of literacy support within Cooperative Learning

Put Cooperative Learning to the Test!

Find a classroom situation which you consider suitable for the three step process “Think – Pair – Share”! Why not discuss it with a colleague?

We are sure: In a class discussion according to the so called “Socratic Method”, where one person asks while only one in thirty listeners has the chance to answer, there is not much room for the “Think – Pair – Share” strategy.

But even within this setting, class discussion can be interrupted for a few minutes. Every student is asked to remember the previous discussion on their own (Think), then to talk about the ideas and thoughts (Pair) and finally to present their results to the whole class (Share), before the class discussion eventually continues.

Can you imagine other situations which could be structured along this three step process?

Tips for Beginners – What to mind!

Here are some tips and hints for introducing Cooperative Learning in your classroom gained from own experience and many conversations with colleagues.

Do you always give time for individual work?

When you prepare your lessons – no matter at home or on the way to your students - never forget to allow time for individual work. Remember: Every learning starts by thinking alone.

Individual Responsibility and Accountability

Can students decide if they want to participate or are they called upon to present their results by random or your choice? The last mentioned will lead to increased student participation because they learn that they can't apprehend and present learn sufficiently when they go hitch-hiking on the accomplishments of others. Insist on everyone writing down their thoughts during every phase of individual work, thus emphasizing the meaning of individual responsibility for his/her learning process.

Individual Work will be Individual Work

Make sure that during individual work actually every student works alone. When they start talking you should react promptly and ask for silence. Occasionally a gesture will be enough. Be prepared for some students to protest. To work alone in silence can be hard from time to time. Do not get involved in a discussion. Clarify in another lesson, why you pursue the concept of individual work so consequently.¹

Strict Time Limits

If you want that students start immediately to work on their tasks, then insist that they stick to the time limits. But specify them with consideration. Do not worry, your students will soon adapt to time limits. Apart from that, there is always an opportunity for students to learn about things they have not yet read or understood from a partner or another group member during "Pair-Share- Time"

Monitoring

Walk around your classroom during „Pair Time“ Watch your students carefully. What is Sven doing during „Think-Time“? Why are Laura and Yvonne not sharing? But intervene only most cautiously.

Establishing Transparency

Establish transparency for your students. Explain the structure "Think – Pair – Share" and give reasons for your decisions. Point out the rules for individual work to the students and explain why they have to follow them very strictly. Invite the students to ask for the three step process of "Think – Pair – Share" when needed – that will make it easier to adapt to the new routine.

Start with simple activities

If you want to enhance your classroom activities and gradually introduce Cooperative Learning strategies, do not plan complex structures or a complete transformation of your teaching. To begin, start using the three step process "Think – Pair – Share" as often as possible

... all this creative power of the mind amounts to no more than the faculty of compounding, transposing, augmenting, or diminishing the materials afforded us by the senses and experience."

David Hume, An Enquiry Concerning Human Understanding Section II: of the Origin of Ideas

¹Especially during individual work learners need suitable methods and learning strategies. If they can rely strategies like that, students are more likely to learn autonomously and self-controlled and the level of individual and group performance will increase.

Start Now!

Note down some short assignments for your lessons, why not for tomorrow.

Remember:

- Think Time
- Sharing/Cooperation
- Personal responsibility

Subject

Lesson of.....

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Subject

Lesson of

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By the way

This now may seem new and difficult to you and does take some effort – but after a few days it will be routine. You will be able to come up with oral student assignments ad hoc - in any teaching situation.

1.3 Structuring the Three Step Process!

The Placemat Activity

When applying the three step process „Think – Pair – Share“ it can be helpful to use a graphical structure, known as “Placemat Activity”. Basically, it is no own method but a highly effective procedure to manage cooperative processes helping to compare and collect results

Procedure:

The students are formed into groups of four or three. Every group is allocated a large piece of paper and is asked to draw a diagram on the paper with spaces for each participant to write down their own thoughts about the topic and one space in the middle for the results of the group.

1. In the first phase (Think) the students note down their own thoughts, results or questions emerging from individual work in their personal space.
2. In the second phase (Share) individual results are shared and compared. The worksheet can be moved clockwise, so that every participant can see and understand the results of others – or the participants can move around clockwise – until they are all back on their original seats and have seen all results. During this phase the students can check their own results, confirm or revise them and talk about contradictions and problems in order to obtain a group result. The common results are written in the central space of the worksheet.
3. In the third phase (Share) the students present their group results to the whole class, using the notes of the diagram's middle.



Why Placemat-Affectivity is So Effective

Placemat Activity is not the only procedure to structure the order of individual work, cooperation and presentation. But the graphical structure creates intense working phases because it clearly illustrates the alternation between Think and Pair phases for the students. The allocation of their own personal space in the diagram reinforces the task of working individually. As the common space in the center requires students to bend forward, it allows interaction to be physically visible and demonstrates that students only need to talk in a low voice with each other. The worksheet demonstrates that the group works as a team.¹

Working with the Placemat worksheet proves to be very motivating in practice – because the large sheet of paper focuses attention and keeps concentration levels high. This is due to several reasons. On one hand, to change methods and media is always advisable, because different learning types and their learning approaches can be addressed.² On the other hand, pragmatically spoken, the individual accountability for the group results becomes very clear to every participant. Each student and every teacher can identify at a glance, who contributed which ideas and in whose space no results can be found. This leads to a high level of student participation. The circle in the center which remains empty during the phase of individual work illustrates that the work is all about reaching a team result.

Tips for your practice

- When students present their results to the whole class (Share), they can cut out the center space and use it as a prompt sheet for their presentation.
- It can be useful to put a transparency in the center space. This can be completed at the end of the interactive phase (Pair) and used for presentation.
- If the center space is very large (A3 or bigger) this space can generate posters for presentation (Share). Of course then the students should use well visible mark-up pens. During individual work the students use pencils or fountain pens to write into their corresponding small spaces.
- Most desirable but rather expensive are paper sheets for flipcharts. Or you can use the various posters to be found in the school. Collect them and use their reverse sides.
- If you do not have large sheets at hand you can also use A4 or A3 formats. Every student receives a sheet and one sheet is put at the center of the group table. During Pair Time the four sheets move clockwise from student to student.

It is interesting to compare the work intensity of groups working with one large sheet for all to those working with single sheets. Our experience shows that there are significant differences – especially for difficult learning groups.

Link

Read Chapter 3 about the presentation of team results in the classroom. During the third phase (Share), when group results are presented to all the learning process usually is not fully completed due to the fact, that in this phase contradictions between group results regularly become obvious. They have to be resolved and occasionally the groups have to rework their own results.

¹It is important to us, that a group result qualitatively surpasses individual work. But not always cooperation results in a common group result. Eventually the group members do not agree and there are two opinions which have to be worked on in the next step. Sometimes students cooperate but then go back to work individually on their notes. In general, however, students are required to obtain a group result, which exceeds individual work qualitatively. Please, read also chapter 8. The section about “Positive Interdependence” illustrates the advantages of cooperation.

²Cp. Gardner 2002, p. 165 ff.

1.4 Getting into practice: An Encouragement

Now you have read the first chapter and probably worked through some passages. If you do not agree with some suggestions at first sight we nevertheless would like to encourage you to test some of them in practice. We do know that in high quality instruction the teachers must identify with what they are doing. This also applies to the application of Cooperative Learning. Your students will always feel if you are genuine or not.

If you work through this book together with a colleague or if you want to enhance and change your classroom teaching jointly – please talk about your experiences with Cooperative Learning as often as possible.

When difficulties and obstacles occur:

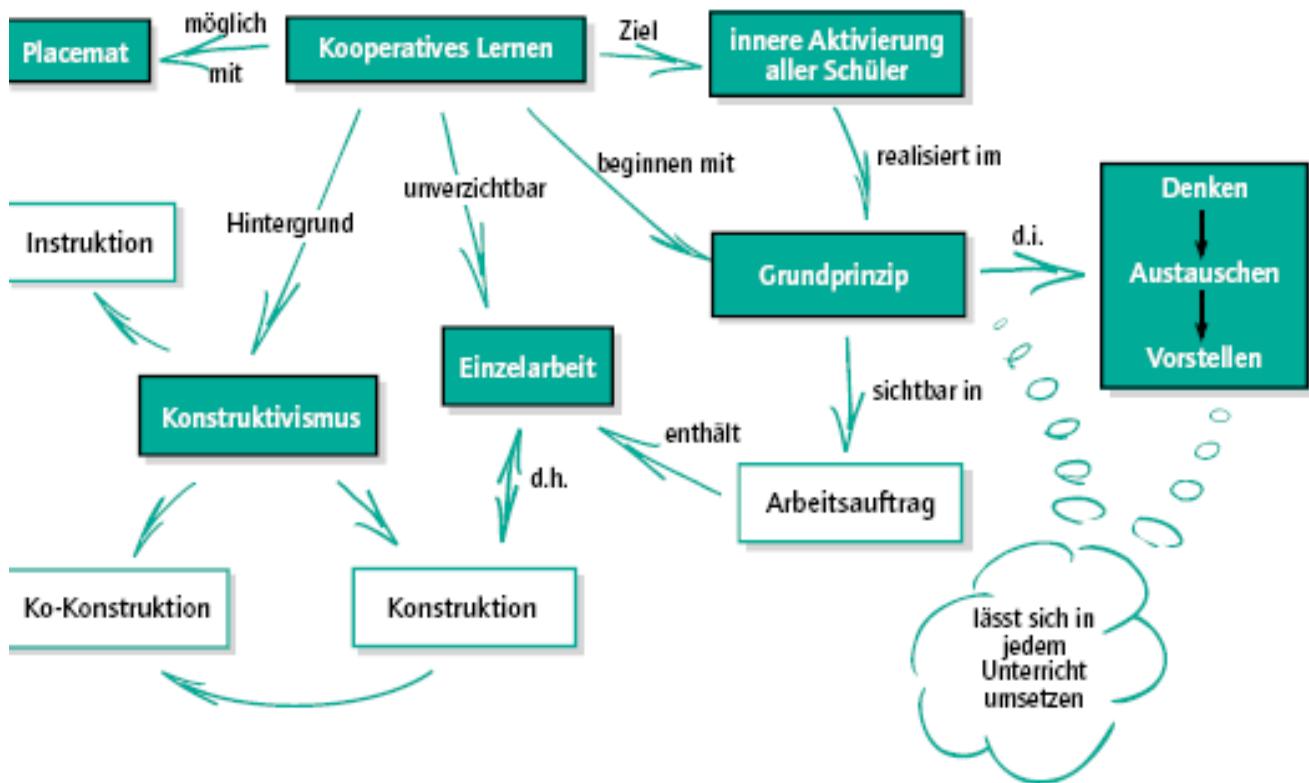
- Always remember your prior teaching: Was it really problem-free?
- Look at the learning opportunities. How many students are working at the same time? Compare this to a more teacher-centered instruction model!
- Try the method a second or third time. Transition does not always work at one go.
- Think about the reasons for small or big problems. Innovate your teaching only step by step, but stick to your goal.

Maybe it sounds exaggerated but we would like to encourage you:

- Make room for every student to enable students to think!
- Demand that every student thinks!
- Try variations!
- Break old routines!
- Start off the very next day!

Looking Back

Starting with Cooperative Learning



Placemat
 Möglich mit
 Innere Aktivierung
 Instruktion
 Hintergrund
 Unverzichtbar
 Beginnen mit
 Realisiert im
 Konstruktivismus
 Einzelarbeit
 Grundprinzip
 d.i.
 Denken Austauschen Vorstellen
 Ko-Konstruktion
 Konstruktion
 Arbeitsauftrag
 Lässt sich in jedem Unterricht einsetzen

Placemat Activity
 suitable activity
 intrinsic activation of all students
 Instruction
 background
 not possible without
 begin with
 realized by
 Constructivism
 Individual work
 Basic principle
 that is
 Think Pair Share
 Co-Construction
 Construction
 assignment
 can be used in any instruction

- In this chapter the basic principles of Cooperative Learning have been introduced. They demonstrate how the process “Think – Pair – Share” sits at the core of Cooperative Learning and that it can be seen as an universal activity for every instruction.

- We demonstrated that assignments should always be issued with explicit information regarding thinking time, individual work, Share Time and personal responsibility.
- We emphasized that during individual working time you should pay attention to silence and concentration in order to keep students from disrupting the activity.
- If you work with the introduced graphical structure (Placemat Activity) this learning phase is already structured along the three step process of “Think – Pair – Share”.
- The theoretical background derives from a constructivist methodology which stresses the fact that Cooperation promotes learning. In this context the terms “Construction, Co-Construction and Instruction” are to be understood as central categories of Cooperative Learning.
- We wanted to show that, by no means, you should throw over board your teaching experience and competence when working with Cooperative Learning techniques. On the contrary, your competence is absolutely essential and can very easily be integrated in the process of cooperative learning if you change the sequence of your tuition and always remember the three step process of “Think – Pair – Share”.