THE STUDY GROUP TOOL KIT

How to Start a Study Group that Works
Benefits of a Study Group:

“A student’s most important teacher is another student” –Arthur Chickering

• Knowing you’re not the only one who’s struggling with the class!
• A chance to ask questions and wrestle with problems in a less intimidating setting than a lecture hall or a professor’s office. Additionally, fellow students are often able to explain complex concepts in a way that is easier to understand than a professor.
• Provides additional sets of eyes and ears to catch what you might have missed in the lecture and/or reading. Lecture notes can be compared and meanings clarified.
• The act of teaching fellow students is also an act of learning. When you explain a concept to someone, you are reviewing the material for yourself and deepening your understanding. When you are asked to explain something, you might realize that you don’t understand it as well as you thought you did.
• Encourages active learning. Research has shown that an active engagement with the subject through discussion and teaching results in a heightened level of understanding. You have the responsibility to contribute to the group rather than passively taking lecture notes.
• Provides motivation—you have a responsibility to the group to be prepared.
• Makes you stay on top of the work and not save all of your questions until the night before the test.
• Learn other students’ strategies and ideas for studying.
• Learn valuable leadership skills such as how to listen and encourage group members, participate effectively, articulate your ideas and work through issues as a group of diverse abilities.
• Do better in the class! Research has shown that students who participate in a study group will do better in a course overall than students who do not.
WHAT TO EXPECT FROM A STUDY GROUP:

- A supportive environment where you feel comfortable contributing.
- A place where it’s okay to say that you don’t understand and not be criticized for it.
- A place where you are expected to come prepared, contribute meaningfully, and respect your peers.
- A group that meets reliably once a week.
- A group of peers equally dedicated to understanding the material as a group.
- A group that challenges you to look at material from different angles.
- A place to review material covered in class, exams, and readings, ask questions and practice problems.

WHAT NOT TO EXPECT FROM A STUDY GROUP:

- A substitute for going to class or doing the homework.
- A guaranteed A.
- A place to have the answers given to you or your work done for you.
- A place to have the material “taught” to you. That’s what class is for.
- That someone will have the answer you’re looking for. Often, the group will have to struggle through a concept together, but many minds are better than one, right?
- A place to vent about the professor, class or classmates. No one likes hard work, but complaining about it won’t get the job done.
- Do not expect to receive judgments about the fairness or validity of grades.
YOUR RESPONSIBILITIES:

• Come on time to every session. That means attending when you do understand the material, as well as when you don’t. It does not mean you show up only the week before an exam.
• Bring your notes from class, textbooks, hand-outs and anything else relevant to the course.
• Complete the reading and assignments to the best of your ability before the study group. The study group is not a substitute for doing your work.
• Look over your notes and the text before the study group so that you will come prepared with questions to ask and topics you want to discuss. Have these written down ahead of time or post them to the group forum if there is one.
• Go to class! You won’t be able to contribute meaningfully if you skip class.
• Actively participate in the study group session. Do not sit back and wait for others to figure it out. Doing so shows a lack of commitment and could be grounds for dismissal.
• Treat others with respect.
• Complete tasks the group assigns to you on time (ask the Professor a question, look something up, etc.)
• Don’t be afraid to say you don’t understand something. Don’t criticize others when they do not understand.
• Strive to be the best teacher and learner that you can be. Always seek other ways of looking at things and other ways of explaining concepts.

IS A STUDY GROUP FOR YOU?

Study groups are not for everyone. Knowing your learning style and what works for you is a part of doing well in school. Some things to think about when deciding to join a study group are:

• Are you willing and able to commit to meeting once a week?
• Are you willing and able to take the time to prepare for each meeting (review your notes, formulate questions, prepare practice problems, etc.)?
• Are you willing and able to receive help from your peers and to offer help to them in a constructive manner?

When you think back to past group experiences, how do you feel?

Some students cringe when they think of group work. This is often the result of negative group experiences. Most of us have been in a situation where one person in the group gets stuck with doing all of the work and everyone else takes credit. Problems like this can be avoided by carefully structuring a group with strict guidelines and expectations. Strategies for dealing with common problems will be discussed in later sections.

When you feel confused in class, what do you do?
Some students are afraid to admit that they are completely lost. If that describes you, stop! You are not the only one feeling that way. A study group gives you the opportunity to ask questions in a less intimidating setting than a lecture hall.

Do you always feel the need to be in control?

Here’s your chance to break the habit. When you have a question related to a class, do you immediately shoot an e-mail to the professor or do you consult a classmate? Some students are under the impression that only the professor has the answer and miss out on a valuable resource: your peers! By learning to listen to your peers and working together, you can often find the answer you are looking for. A study group will only work if everyone understands they are equal players on a team striving for the same goal.

Do you prefer to sit back and listen or are you able to be an active participant?

Would you want to be a part of study group with people who didn’t contribute? The success of a study group depends on its members. You cannot expect your peers to contribute to your understanding if you do not reciprocate. While public speaking does not come naturally to some students, a study group is meant to be a safe and comfortable environment in which even the shyest of students can practice this skill. By joining a study group, you are accepting the responsibility to both contribute meaningfully to the group and encourage and support the efforts of your peers.
THE NUTS AND BOLTS:
Who, What, When, Where, How?

Students can fill out a form requesting a study group in the Academic Resource Center. Please indicate your class and section/Professor’s name. We will then match you with other students in the same class. Encourage your friends in the class to sign up so that the group can get started!

As a member of a study group registered with the Academic Resource Center, you can schedule a consultation with a staff member in the ARC to discuss whether a study group is for you, how to make it more effective and how to troubleshoot when it does not seem to be working.

Study groups are not for everyone, especially when they are ineffective, but with a little thought and planning, you can create a highly effective and reliable study group. The important thing is to take proactive measures: structure is key! Agree on rules and procedures at the very first meeting. Have all members sign the study group contract. When a new member joins, they must sign as well. Always have an agenda and stick to it.
THE STUDY GROUP CONTRACT:
The Glue that Holds Us Together

I understand that the study group will meet once every week for one hour. Belonging to a study group does not mean that I only come when I need help, but will also come when I understand the topic to help teach it to others. The act of teaching the material to others will enhance my own understanding. Therefore, I understand that if I miss more than four sessions a semester, I will be asked to leave the study group.

I will be an active participant in every session I attend. I will try to help other students when I understand a topic and ask for help appropriately when I do not understand. I will try to improve me teaching and learning skills through this exchange, always seeking a new way of understanding.

I will contribute constructively and positively to the group, never excluding a student or criticizing their intelligence. I recognize that this is not a forum to voice my dislike of a professor, TA or fellow student and will abstain from this negative behavior. We are here to support and help each other and if I do not contribute to a positive and comfortable environment, I will be asked to leave.

I will come prepared and ready to learn. I will have gone to class, reviewed my notes, and done the reading and assignments. I will have a list of questions prepared and know what I want to get out of the study group. I will not expect my peers to do my homework or take the place of my professor. I will obey the University’s policy on cheating and when I have questions about such, I will consult my professor.

_________________________________ __________________________
Name       Study Group Name

_________________________________ __________________________
Signature       Date
STUDY GROUP MEETING

Subject:

Date: 
Time: 

Leader: 
Secretary: 

Attendance: 
1. 
2. 
3. 
4. 
5. 
6. 
7. 
8. 

Administrative Issues: 

Issues/Problems/Questions to be addressed: 
(As determined by the leader based on posts in the forum) 

1. 

2. 

3. 

4. 

Wrap-up: 
Goals for next meeting/anticipated focus: 

Leader for next meeting: 
Secretary for next meeting: 

WHEN THE GROUP GETS STUCK:
PROBLEM SOLVING STRATEGIES

Strategies to help you understand the problem:

Clarify the problem. It is easier to solve a specific problem than a vague one. So clarify the problem before you start looking for a solution.

Identify key elements of the problem. Problems come to us with varying amounts of important and useless information. Focusing on useless information distracts us and wastes time. So identify the key elements of the problem before you start looking for a solution.

Visualize the problem, relevant process, or situation. Sometimes we can see the problem and all its important details right in front of us. This helps us understand the problem. Other times we can’t see important elements because they have already occurred or are not visible. In these cases, it is valuable to visualize important elements of the problem.

Draw a picture or diagram of the problem or a relevant process or situation. Visualizing a problem can aid understanding. However, we can keep only so much visual information in our minds at once. Hence, it is often useful to draw a picture or diagram. So, if you want to calculate when two airplanes will collide, draw their paths and speeds.

Create a model of the problem or a relevant process. Creating a model of a problem or relevant process helps us focus on essential elements and gives us the potential to alter the model and see what happens.

Consider a specific example. Problems often come to us in the abstract. Creating a concrete example helps us explore the problem just as we might explore a specific example of dinosaur bones to understand dinosaurs. If you want to learn how to calculate the volume of a sphere, use a specific radius, such as one meter, and apply the formula.

Consider extreme cases. Considering extreme cases is a type of considering a specific example. Here the example is chosen to test the limits of a relevant parameter. Sometimes this gives insight into important processes.

Change perspective. If you want to reduce crime in a community, look at crime from the perspective of criminals and victims. If you want to convince a hostage-taker to surrender, take that person's perspective. If you want to avoid being bitten by a vicious dog, take the dog's perspective.

Simplify the problem. Some problems overwhelm us with their complexity. In such cases, it may pay off to simplify the problem. So, if you want to solve an equation \((a^2 - 2a + 1) = 0\), simplify it to \((a - 1)^2 = 0\).

Solve one part at a time. It is sometimes possible to make a problem easier to solve by attacking one part at a time.
Redefine the problem. If a problem seems presently unsolvable, consider what value underlies the desire to solve that problem, and redefine the problem into something solvable.

Organize information into a table, chart, or list and look for patterns. Information collected about a problem often becomes easier to search for patterns when put into a table, chart, or list.

**Strategies involving use of external aids to help you identify possible solutions:**

Seek the answer in written material. Consult your textbook, class notes, notes of others, handouts, library books, dictionaries, encyclopedias and the internet.

Ask an expert. If all else fails, elect a group member(s) to bring the problem to the Professor’s or TA’s office hours.

Apply the scientific method. The scientific method has helped to produce many of the great accomplishments of recent human history, such as doubling the average human lifespan, putting a human on the moon, and discovering planets orbiting other stars. The method involves systematically collecting data to test a hypothesis, applying certain types of research design and analysis methods to the data, and being skeptical about the results.

**Strategies involving the use of logic to help you identify possible solutions:**

Reason by analogy: Use what you have learned about similar problems. Often the problem solving methods we use and the actual solutions we have found to be effective in the past can work to solve a current problem.

Use deductive reasoning. Deductive reasoning involves going from a general rule to an application in a specific instance.

Use inductive reasoning. Inductive reasoning involves drawing on specific instances to form a general rule.

Question assumptions. Our thinking contains many assumptions or beliefs that have never been well tested. Your difficulty with a problem might be the result of an unknown misunderstanding or incorrect assumption. Be aware of the knowledge you bring to a problem and question its validity.

Guess, check, and adjust. It may work to guess at a solution, especially if the range of possible solutions is limited as in a multiple-choice test. You can check to see whether your guess is right, and then eliminate the option if it is not. Sometimes guessing can help us even when the range of possible answers is unlimited. For instance, in solving for x in x + y = 12 and 2x – y = 3, if there are no answers from which to choose, and you don’t know how to solve simultaneous equations, you can guess at what x is, and if you miss, you can use the degree to which you miss to make a better second guess and so on, adjusting your guessing as you go.
Work backwards. If the answer to the problem is available, the group can try to work backwards to figure out how to arrive at the correct answer.

Think confidently. Confidence helps us persist in problem solving, and confidence comes most powerfully from problem solving success. So, think about past problem solving successes or solve another problem to boost your confidence about solving a specific problem. Useful thoughts include “I have solved more difficult (or similar) problems,” “I know how to approach this problem,” and “I can solve this problem if I try hard enough.”

Take a break. People can get fixed on a certain way of thinking about a problem or a specific class of possible solutions. It sometimes helps to take a break and work on another topic area.

* Adapted from “Fifty Problem Solving Strategies Explained” by John Malouff, J.D., Ph.D. Lecturer, University of New England School of Psychology, Australia
A SMORGASBORD OF LEARNING STYLES

One of the great things about a study group is the variety of learning styles represented. The variety of learning styles in your group enables and challenges you to look at things from different perspectives and to attempt to understand and explain concepts using tools tailored to each style. For example, you might be an auditory learner, but you learn someone else in the group is a visual learner. While hearing explanations works for you, this would not work for the visual learner. If you know that they are a visual learner, you could try other techniques such as drawing a model or diagram. By doing so, you are expanding your own understanding by having to look at something from another point of view.

PICKING THE RIGHT TOOL FOR THE JOB:

Knowing the learning styles of the members in your study group is important to the success of the group. Have members in the group determine their learning style—many people know this already, if not, you can find learning style assessment questionnaires in the ARC or online. Each member will then write their learning style on a sticker that they will wear for the duration of the session. When explaining concepts, each member must incorporate strategies that work for the different learning styles represented.

Strategies for Visual Learners:

- Convert information into visual maps, hierarchies, grids or timelines.
- Create illustrated flashcards.
- Create “cheat sheets” to visually organize information.
- Take detailed notes.
- Use visual metaphors.
- When you ask them to explain something, suggest that they do it by writing the explanation down.

Strategies for Auditory Learners:

- Explain the problem or concept out loud. The study group is a perfect place for this!
- Make up and repeat rhymes to remember facts, dates, formulas, etc.
- Reason through solutions out loud.
- Quiz each other out loud.

Strategies for Tactile/Kinesthetic Learners:

- Write lists over and over again.
- Make models that demonstrate key concepts.
- As the student is explaining something, have them point to the subject matter in the book, on the board, etc., while they are reading it out loud.
- Stand up while explaining something to the group.
A STUDY GROUP IS BASED ON THE RECIPROCAL RELATIONSHIP OF ITS MEMBERS.

If your roof has a leak and you have a friend who's a roofer, what would you do? If you know this friend needs the snow removed from his driveway, and you have a snowplow, what would you do?

That’s how a study group works.
BUILDING THE STUDY GROUP SESSION

What happens in the actual study session depends on the subject matter and the goals of the group. Some people view study groups as a chance to review material, others use them to enhance their understanding of difficult concepts and still others see them as a time to discuss complex ideas from a variety of perspectives.

Ideas:

BALL TOSS: Review and warm-up exercise. Have everyone sit or stand in a circle facing each other. Toss a ball or crumpled up piece of paper to a student and have her/him tell what they thought was the most important concept just learned. An alternative would be for the person with the ball to ask a review question (such as a definition, key concept, etc.) and then toss it to someone else who then has to answer the question before asking another question and tossing the ball on.

PROCESS BALL: Similar to the above, but each person tells one step of a process (such as mitosis, etc.) or a concept when the ball is tossed to them. Meanwhile, someone else in the group can write the steps on the board.

TWO TRUTHS AND A LIE: A group member writes three statements related to the subject matter being studied on the board. Two of these statements should be true and one false. The group must then discuss and determine which ones are true and which are false. This is particularly helpful review for exams that include a true/false section. Make sure everyone in the group understands what makes statements true or false before moving to the next one.

JEOPARDY: Thinking of possible test questions and then answering them is a useful way of reviewing material and testing your understanding. Divide the group into two teams. Have the leader or group members write answers on index cards. These can be key words, facts, theories, etc. The leader then reads out the answer and the team that provides the question gets a point.

LEARNING STYLE JUMBLE: A useful activity for one of the first sessions to makes people aware of different ways of explaining things to different people. Have group members determine their learning style through a self test and then wear a sign indicating the result. Through the duration of the study group, people must explain concepts in ways that are useful for particular learning styles. It might be helpful for students to share ways they learn best at the beginning of the session. For example, a visual learner would want to be shown diagrams and pictures rather than hearing an explanation.
DIRECTING QUESTIONS BACK TO THE GROUP: THE LEADER'S ROLE

If a study group turns into a question and answer session with the tutor, active learning is not taking place. Remember, the leader’s role is to facilitate learning by giving students the strategies and support needed to find the answers for themselves. A tried and true method for doing this is to reflect questions back to the group. Your natural tendency will be to provide the answer immediately, but with a little practice, you will see that you are helping the students more by guiding them towards the answer rather than giving it to them. When someone asks you a question, you can try one of the following ideas to reflect it back to the group.

- Does anyone know the answer to that question?
- Can anyone help with that question?
- Can anyone find something in your notes that will help us answer this?
- Let’s see what your textbook/notes have to say about this.
- What do you think about what she/he just said?
- How is that related to…?
- What do you mean by that?
- In what way?
- What are you assuming?
- Why would that be?
- How would you do that?
- Can you give us an example of that?
- What do we need to know to solve this problem?
- Can you summarize what we’ve discussed thus far?
- How is that related to…?
- How would you say that in a different way?
- Which words in the question confuse you?
- What are we trying to figure out?
- What do you need to do next?
- How did you do that?
- Can you think of another way to think about this?
- Would any of you like to add something to this answer?
DEALING WITH DIFFICULT BEHAVIOR

Participation in a study group is voluntary. Those who are unable to behave appropriately and contribute to the group will be asked to leave. There are some less drastic measures of dealing with difficult behavior that can be tried before asking someone to leave.

BLOCKING

CHARACTERIZED BY:

- Gets frustrated easily
- Stops trying / expresses hopelessness
- Freezes / gives up

SOLUTIONS:

✓ Figure out what the student does know and return to that to build confidence.
✓ Show how this understanding forms the foundation for the more difficult concepts. Take baby steps, always returning or linking things to what the student does know.
✓ Be supportive.

CONFUSION

CHARACTERIZED BY:

- Bafflement/disorientation/disorganization
- Feels helpless about the class and homework
- Really doesn’t “get it”

SOLUTIONS:

✓ See above ideas
✓ Help the student structure his/her notes, make study guides, flash cards, etc. to help organize the concepts.
✓ Review study skills

MIRACLE SEEKING

CHARACTERIZED BY:

- Unrealistic expectations for what the tutor/study group can do
- Enthusiastic, but lacks specific questions or input
- Expects to learn through osmosis; very passive
- Difficulty concentrating and actually getting down to business
SOLUTIONS:

✓ Keep focused on the work. Break it down into simple steps.
✓ Follow a set structure for each meeting. Stick with it.
✓ Give the student clear assignments or ask specific questions.
✓ Explain the need to actively participate to actually learn the material

OVER-ENTHUSIASM

CHARACTERIZED BY:

• High expectations of self and others in the study group
• Focuses on long-term goals rather than the immediate task
• Frustration with other members if they do not share the same drive
• Under a lot of stress, may sometimes buckle under pressure

SOLUTIONS:

✓ Be understanding and reassuring
✓ Help the student to understand that everyone has a unique process of learning
✓ Demonstrate patience and encourage the student to do the same
✓ Demonstrate effective and constructive ways the student can encourage classmates rather than criticize them

RESISTING

CHARACTERIZED BY:

• Hostile, passive or bored behavior.
• Disinterest and/or frustration with work, class, professor, or group
• Easily frustrated or angered
• Defensive attitude

SOLUTIONS:

✓ Do not let the student’s negative attitude bring the group down. If necessary, remind the student of the purpose of the study group and that it is not a place to vent about the class
✓ Give the student space if necessary.
✓ Give the student the option to step outside for some fresh air
✓ Focus on the positive rather than the negative. Return to material that the student already knows
PASSIVITY

CHARACTERIZED BY:

• Noninvolvement and inattention
• Lack of participation
• Boredom

SOLUTIONS:

✓ Try to determine the cause of the student’s lack of participation—is he or she shy, confused with the material, or genuinely bored?
✓ If he or she is shy—encourage participation by calling on them to answer something you know they know. Praise them and build up their confidence in the validity of their contributions.
✓ If necessary, take the student aside to discuss their lack of participation and formulate a strategy. Set goals—next week they should try to participate two times, the following week four times, etc.

EVASION

CHARACTERIZED BY:

• Manipulation—tries to get others to do the work for him or her
• Steers the group to something they want to work/focus on
• Avoids difficult concepts

SOLUTIONS:

✓ Give the student specific tasks/focus/questions
✓ Remind the student why they’re there
✓ Create an environment where not knowing the answer is okay—allow the student the freedom to dig in and get their hands dirty