

TEACHING METHODOLOGIES USED IN AVID IN A NUTSHELL

"AVID methodology" is not about changing curriculum but is about allowing almost all students to have access to a rigorous college preparatory curriculum. The teaching methodology which is most effective in this quest is

- Collaborative, subject specific learning groups
- Inquiry method
- Writing as a tool of learning

COLLABORATIVE LEARNING GROUPS

Within AVID, we refer to our groups as collaborative rather than cooperative because they do not necessarily follow all the organizational rules which gurus of cooperative learning espouse. In AVID, the purpose of collaborative learning is to bring students together to take responsibility for their own learning. IN small groups, they ask, explore, and answer questions; they become better listeners, thinkers, speakers, and writers; they discover ideas and remember them because they are actively involved with them. The teacher/tutor becomes a coach, carefully guiding students in their learning. Research shows that students learn best when they are actively manipulating materials through making inferences and then generalizing from those inferences. Collaborative groups encourage this kind of thinking.

Collaborative Learning Groups vs. Traditional Learning Groups

<u>Traditional</u>	<u>Collaborative</u>
No interdependence	Positive interdependence
No individual accountability	Individual accountability
Homogeneous	Heterogeneous
One appointed leader	Shared leadership
Responsibility only for self	Shared responsibility for one another
Social skills ignored	Social skills necessary for task completion
Teacher/tutor ignores group functioning	Teacher/tutor observes and intervenes
No group processing	Group process their effectiveness

Preparing for Collaborative Learning Groups

The Task:

IN collaborative learning groups, students experience the process of learning, the how as well as the what of learning. In order to achieve this, the teacher/tutor must carefully guide the group, thereby encouraging members to share their ideas and to explore and respect the ideas of others. The groups must constantly probe and define and redefine until the expression of ideas is precise and clear. The group task may have students share individual completed assignments or notes, as well as work together to brainstorm or to problem solve.

Selection of Groups:

In collaborative learning, there is no fixed way to group students. Depending on the class and the assignment, the teacher-determined, self-selected, spatial or randomly selected groups.

Preparing Students:

Students need to be prepared to work in groups, and, indeed, in the beginning, may shy away from group work because they are reluctant to share their work. Group work should begin with experiences, which are non-threatening, gradually increasing in task demands and duration. Teachers need to discuss "group etiquette," stereotyping and group dynamics with the students before they begin work, as well as tell them that the benefits to working in collaborative groups are:

1. No one knows everything.
2. Teachers expect analysis, synthesis, and evaluation of subject matter, which is "the stuff" of collaborative groups.
3. Students will move farther faster and remember more.
4. Learning with other people is more fun than studying alone!

Since learning to collaborate in groups is an ongoing process, after completing a group activity, the students should write about and discuss what went well in their groups and what they need to improve for next time.

Avoiding Mayhem:

1. Provide the students with careful instructions **and** simple directions before they move into groups.
2. Establish a specific routine for moving into groups.
3. Have students move their desks close together to prevent loud talking and to create a group atmosphere conducive to exchanging ideas.
4. Establish a reasonable time limit. Allowing too much time for an activity can cause the groups to deteriorate. It is better for the groups to have too little time than too much.

Remember, it takes time and practice for students to learn to work effectively in collaborative learning groups

INQUIRY METHOD

In collaborative learning groups, the method of instruction used by the teacher/tutor is inquiry. Compared to didactic instruction and coaching, inquiry differs from its counterparts in one unique and very critical way: it immediately engages students with their own thinking processes. In other words, it teaches students to think for themselves instead of chasing the Right Answer. What then results from such a precarious modus operandi, especially with students as young as nine or ten years old? Student ownership for enlarged understanding of concepts and values is the result. So when Socrates in the Platonic dialogue says,

Let us examine this question together,
my friend, and if you can contradict
anything that I say, do so, and I shall
be persuaded.

Crito, Plato

he captures the essence of inquiry as an instructional method. Specifically illustrated by Socrates' statement are several points.

1. Participants begin the learning groups with questions.
2. Participants engage in all levels of critical thinking, from recall of knowledge to evaluation.
3. Participants pursue understanding with mutual respect and civility, mindful of each other's dignity
4. Participants are willing to be persuaded by arguments/evidence more powerful than their own and to change their minds in light of fresh insights.

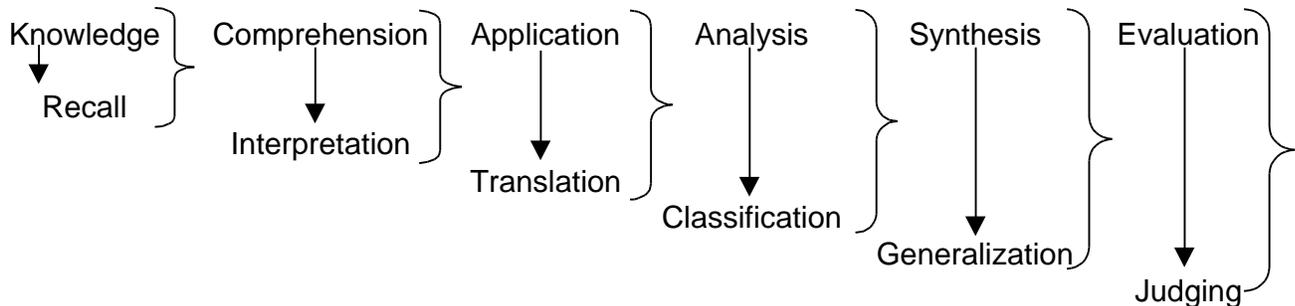
Description:

For students in collaborative learning groups, the text for inquiry may come from ideas/notes in their learning logs or materials from their subject area classes. Thus students should be encouraged to come to the group with questions already formulated. Guided by the teacher/tutor, students exchange responses and collaborate in a search for understanding. Verification of the questions raised and responses and given comes by returning to the text. The strength of the group process rests on the belief that the group returning to the text. The strength of the group process rests on the belief that the group can arrive together at some understanding that would not be arrived at independently.

Process:

Once the group session begins, the ensuing interaction should sound like conversations moved along by a series of, "How can...", "What do you mean by...", "Why does...", "I don't see the connection between...", and so on. There are several questioning strategies teachers/tutors can use to lead their groups. Two highly recommended methods outlined below are based on work in cognitive functions by Benjamin Bloom and Arthur Costa respectively.

Using Bloom's hierarchy of cognitive skills, teachers/tutors can ask questions that follow along a continuum.^①



A second way to craft questions applies Costa's model of intellectual functioning in three levels.^② Level one questions focus on gathering and recalling information; level two, on making sense of gathered information; and level three, on applying and evaluating information. Examples of the types of behaviors that solicit questions using Costa's levels appear below.

Level One:	defining	What is the definition of "lunar eclipse?" (definition)
	describing	
	identifying	
	listing	How can we express the equation $2x(4-5y)=3y=26$ in three ways (list)
	naming	
	observing	
	reciting	Which states seceded from the Union to form the Confederacy? (identification)
	scanning	
		How does "The Road Not Taken" (Frost) begin? (recitation)

^① Benjamin S. Bloom, Taxonomy of Educational Objectives: Handbook I: Cognitive Domain (New York: David McKay, Inc., 1956)

^② Arthur L. Costa, Developing Minds: A Resource Book for Teaching Thinking (Alexandria: Association for Supervision and Curriculum Development, 1985), 125-137

Level Two:	analyzing comparing contrasting grouping inferring sequencing synthesizing	<p>In <i>Native Son</i> how does Bigger Thomas' violence against his gang members reveal a deeply rooted insecurity and fear of people? (analysis)</p> <p>In "The Bet" (Chekov), how do the lawyer and the banker differ in their attitudes toward capital punishment? (contrast)</p> <p>How does the term "manifest destiny" capture the essence of western expansion in the United States? (synthesis)</p>
Level Three:	applying a principle evaluating hypothesizing imagining judging predicting speculating	<p>Use the principle of communicative property, how can we find out how many trees in an orchard having 15 rows, 5 trees each? (application)</p> <p>Which of the characters in <u>Great Expectations</u> suffered the most? (judgement)</p> <p>In <i>Catcher in the Rye</i>, how might Phoebe, years later, describe Holden to her children? (speculation)</p>

The importance of inquiry method cannot be overstated. Skillful questioning by teachers and tutors empowers students to have mastery of their own learning. The converse, giving answers, breeds dependence on the teacher or tutor and is, therefore, detrimental to the students.

WRITING AS A TOOL OF LEARNING

Writing allows students to think in complex ways. Writing contributes to self-knowledge. Writing helps clarify and order experience. Writing helps students to be better readers. Writing enables students to "do better" in school. Writing is basic to thinking, learning, and growth.

Thinking

- Writing is a unique, graphic record of thought that can be reviewed, revised, and used to make new cognitive jumps.
- Writing makes a unique contribution over and above conversation to the development of thought.
- Writing is slow, static, graphic record of original thought. This record allows review and revision.
- Writing is visible, permanent.
- Writing assumes a much slower analysis and synthesis and transforms process into a simultaneous review of thought.
- Writing enriches and elaborates the thought process.
- Writing is essential for linear, analytical thinking.
- Without writing one cannot generate history as an academic pursuit.

Learning

- Writing is a crucial adjunct to learning.
- Writing helps us absorb new information and builds a structure of knowledge.
- Writing helps us find out if we really know the topic.
- Writing is available for instant review.
- Reportage would be impossible without writing.
- Writing is central to the process of understanding new facts and concepts or evaluating new experience.
- Writing allows for clarifying, analyzing, and synthesizing concepts.
- Writing is essential to determining what and how much one knows.
- For a self-critical person, writing is essential for evaluation and analysis.
- Writing is essential to the scientific mind-until it is written, it cannot be examined.
- Writing is a means of development of conceptions and contemplation.

- Writing changes the writer: now there is a graphic record, a visual example of the writer's knowledge.
- Writing as a process simultaneously employs symbolism and graphics. It employs sight and hand.
- Writing results in discovery of what we didn't know we knew.
- The more we write, the more we know, and the better we are able to compete academically.

Writing to learn within AVID assumes three main forms. Samples follow.

1. Notetaking
2. Learning logs
3. Writing process discourse mode lessons

Notetaking

The **AVID notetaking system** is an adaptation of the sophisticated Cornell system. Simply stated, students take detailed notes from class lectures and texts in a wide right hand margin and develop clarifying ideas or questions regarding these notes in a narrow left-hand margin.

A sample follows.

YOU KNOW YOU ARE IN A CLASSROOM EMPLOYING METHODOLOGIES USED IN AVID WHEN...

The primary focus of the classroom is activities that engage the learner's mind, sometimes with the help of a teacher or tutor functioning as a secondary and collaborative catalyst.

Collaboration and independent learning among students is provided in a forum in which students are simultaneously nurtured and challenged. The students know they can trust other students, the teacher and/or tutors both to support their learning and to provide a source of feedback and new ideas. The stimulation and inherent creativity fostered by this collaboration is evidenced by the students' enthusiasm and thirst for knowledge.

In collaborative, subject specific learning groups, students are led through a range of thinking processes which are not based on the assumption that students must acquire one type of thinking before progressing to another.

Students defend their conclusions by retracing their thought processes and the evidence they use to arrive at their conclusions.

In collaborative, subject specific learning groups, students are given time for discussion and/or writing that helps them "pull their thoughts together" to reflect on how their ideas relate to major course concepts.

Writing for learning is used in non-graded, non-threatening settings to clarify thought.

Writing that culminates in a final draft follows sequential steps in the writing/thought process: prewriting (brainstorming), drafting, responding, revising, editing, and postwriting.

Subject matter is taught through various modes of instruction including high intensity experiences involving immediate feedback and attention from the teacher and/or tutors.

Teachers/tutors use mirroring techniques, genuinely personal comments, and questions for which students don't have answers. This strategy is evidenced by a change in the role from teacher/student to "partners in learning." Teacher and tutors limit their evaluation to evoke substantial intellectual growth in students.

Students are graded using a variety of assessments which measure the process of learning as well as the end product.

Student binders contain sections with calendars, notes, and learning logs.

BINDER CONTENTS

NEEDED BINDER CONTENTS:

- Good quality, 3-ring binder, 2 1/2" or 3" rings with pocket inserts
- Five to six colored tab subject dividers to separate each academic class, including AVID
- Zipper pouch to store supplies (3-hole punched heavy duty zip-lock bags also work)
- Two or more pens
- Two or more pencils
- Filler paper (some notebook paper is now available in Cornell note style)
- Assignment calendar for each academic class
- Tutorial logs
- Learning logs

SUGGESTED BINDER CONTENTS:

- One or two trapper pouches (for paper with no holes punched in)
- One or more colored highlighter pens
- Notebook dictionary and/or thesaurus
- Calculator
- Six-inch ruler
- Tips on notetaking and test taking skills, tutorial guidelines, or other AVID strategy sheets
- Sample of notetaking in specific subjects

YOUR BINDER SHOULD BE ORGANIZED IN THE FOLLOWING MANNER:

- Binder front cover
- Plastic supply holder
- Binder grade sheet

EACH SUBSEQUENT SECTION IN YOUR BINDER SHOULD HAVE THESE PARTS IN THIS ORDER:

- Divider
- Calendar/assignment log
- Notes
- Tutorial/learning logs
- Handouts
- Tests
- Blank paper

AVID students are required to take binders to all academic classes and to take notes therein. At least four benefits are derived from this system.

1. The AVID teacher knows the student attended class because the notes are checked in class.
2. The student was alert enough in class and in his/her reading to take notes.
3. The student has engaged in independent work before participating in collaborative learning groups so that he/she may be an active contributor to the groups.
4. Students perceive themselves to be "students," and teachers perceive them as "students" when binders are carried to class and notes are taken.

Not only do the notes help students clarify thought, but as students engage in writing for learning, their writing and language skills become better and better. When students write and write, it is really unnecessary to teach "reading skills." These skills develop as students have experience in using language.

When it is time for students to study for an exam, they may assemble their note questions in a line, covering the detailed notes, and check off what they already know. Research shows that most students study ineffectively because they continue to review what they already know. Students may also share notes with other students. As they become more adept at developing conceptual rather than detail questions and observations, they are often studying the questions teachers include on examination.

Learning Logs

IN a journal, students make regular entries in learning logs. Before students begin working in their collaborative groups, they should complete questions such as the following about the subject they are studying.

1. What did I do in class today?
2. What did I learn?
3. What did I find interesting?
4. What questions do I have about what I learned?
5. What was the point of today's lesson?
6. What connections did I make to previous ideas or lessons?

Each student in the collaborative group should share his/her log responses. If students know they will be sharing with the group, they are more thoughtful in their responses. Learning logs are a good starting point for a collaborative session.

A Few Learning Log Topics:

1. Write About Mathematics

Have students write an explanation to another student of how to do a math problem. They should include the why of the solution as well as how.

2. Writing About History

Have the student's place themselves in an historical period or event and write about it from the point of view of someone who is there. In their responses, ask the students to focus on the what, when, where, why, how, and what if. Or ask the students to write a dialog between themselves and an historical personage, focusing on the same details.

3. Focused Writing

Focused writing is an excellent way to begin a collaborative session. Direct students to write non-stop for five minutes on a specific topic they are studying. The purpose is for students to find out what they know about the topic, to explore new ideas, and to find out what they need to learn about the topic.

Writing Process, Discourse Mode Lessons

Essay writing allows students to think as subject area specialist. Asking students to write as scientists, philosophers, psychologists, or historians requires students to explore the criteria of that kind of writing. Teachers should always begin by modeling the kind of writing in which they wish to have the students participate.

The discourse modes contained in the AVID curriculum are those developed for the California Assessment Program (CAP) Direct Assessment in Writing, as the AVID lessons were precursors of that examination. Each of the lessons is found in detail in the AVID Writing Curriculum: Grades 9-12. The lessons adhere to the following "writing process" sequence.

1. Work with examples of and discuss criteria for the writing prompt.
2. Prewrite.
3. Write a draft.
4. Exchange drafts with peers for comments and revisions.
5. Write further drafts.
6. Complete a reader-writer workshop with one or more peers.
7. Write a final draft.
8. Have teachers evaluate final drafts.
9. After final drafts are discussed, students have an opportunity to revise for publication.