

Tate's 20 is a list of 20 teaching strategies that have been developed by Marcia L. Tate. These 20 teaching strategies tap into the minds of all students, and all learning styles. These strategies are published in a book called Worksheets Don't Grow Dendrites, which encourages teachers to make a change in their teaching styles based on brain research. Dr. Marcia L. Tate is the Executive Director of Professional Development for the DeKalb County School System, Decatur, Georgia. She has presented to over 125,000 teachers, administrators and parents as an educational consultant throughout the United States. Her workshops are very effective because she uses the strategies in her book to engage adult minds as she presents.



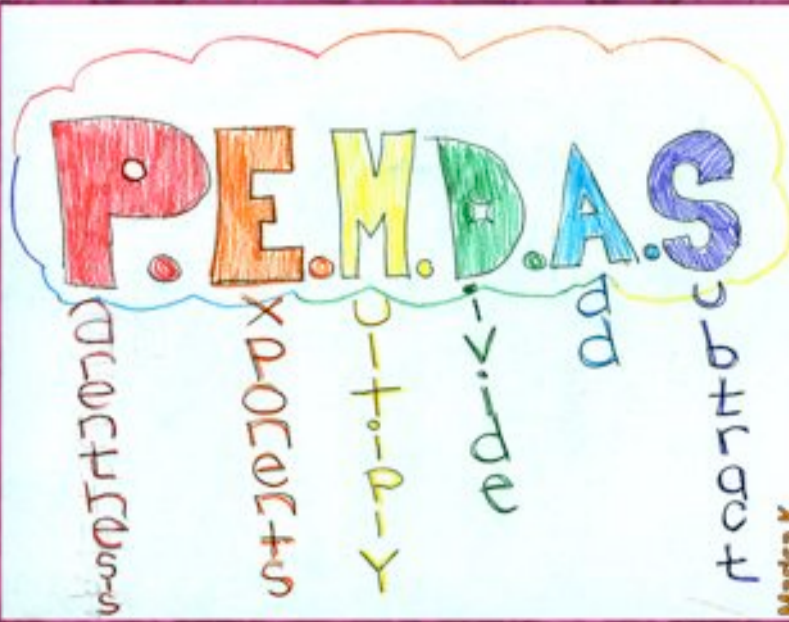
# Tate's 20

## 20 effective teaching strategies to use in your classroom



This poster has been created by HOWL students. HOWL (Helping Others While Learning) is a service learning class of 7th grade advanced reading learners. Our mission is to do service learning projects that help our school, the community, and the world. Service learning is a combination of academic learning, service within the community, and civic engagement. In HOWL, students work together to produce interdisciplinary curriculum that will improve classroom instruction. Our class is made up of Allison D., Anna S., Anthony S., Brandon D., Eric P., Greg C., Katie G., Kyle R., Marisa K., Timothy E., and our teacher, Mr. Phillips.

### Mnemonic Devices



A mnemonic device is a phrase, word, or sentence that triggers your memory of concepts that are being taught. A commonly used mnemonic device would be PEMDAS, which stands for parenthesis, exponents, multiply, divide, add, and subtract. This is the order of operations when solving an equation. So if you had trouble remembering what came first, you could think back to PEMDAS. This will help because your brain will take in information easier if you connect it to other things. However, mnemonic devices can be other things like poems or visuals. From this, you can tell how useful a mnemonic device is.

### Field Trips



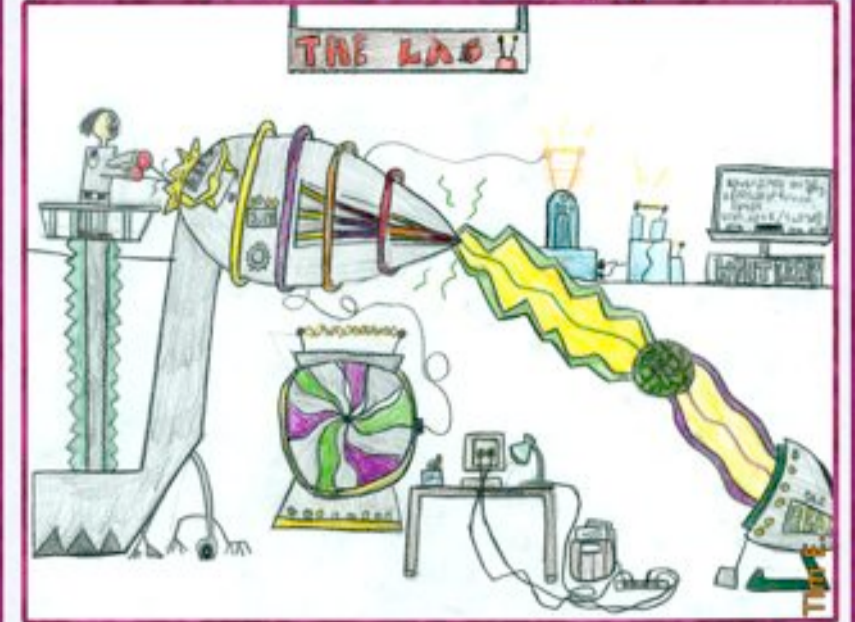
When your teacher announces that you will be going on a field trip, you get really excited and can't stop thinking about it. When you get to the destination and see what you are studying, it makes the concept easier to understand and easier to memorize. When you are on a field trip, you get the urge to learn about why you're there. The best field trip would be a place that not only gets the students to think, but it should get them excited and motivated to learn.

### Games



Your brain tends to remember information when it is reviewed in a fun way. Instead of just reading from a textbook, you could find important information from the text and turn it into a game. Research shows that children tend to learn best from other children. If they get the answer wrong, they will remember the correct answer from that point on. As a matter of fact, the mechanisms that the brain involves when students play games are just as cognitive as when doing worksheets. Games are a fun, effective way to learn.

### Technology



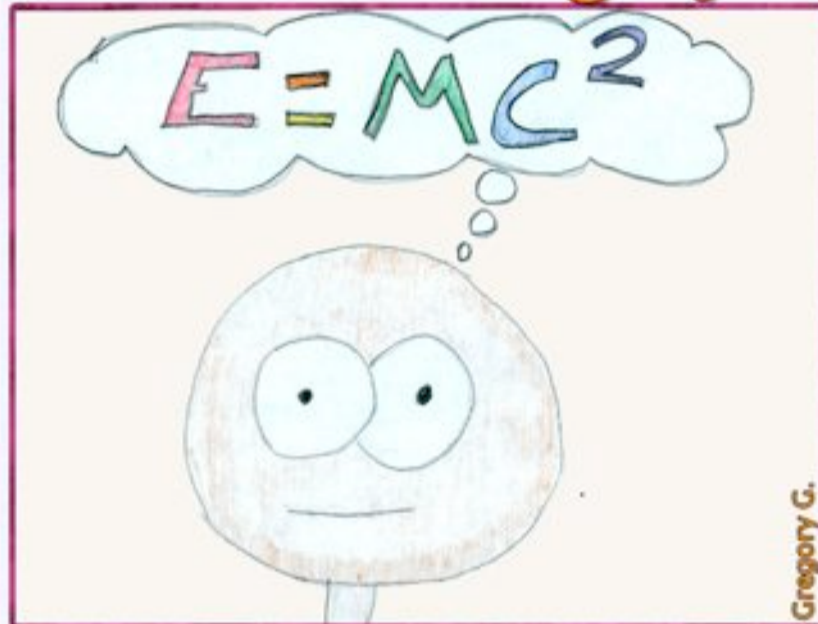
Technology is a great teaching technique. This is a great technique because some kids have fun with technology and seem to enjoy it very much. The strategy is a necessary tool if students are to be prepared for the present and future occupational success. Teachers should let students know that a computer is an information, computation, and communication device. Students will need to be skilled with not only in accessing information but processing it as well. This is a good technique, because kids would rather go on the computer instead of reading a book to find information.

### Writing and Journals



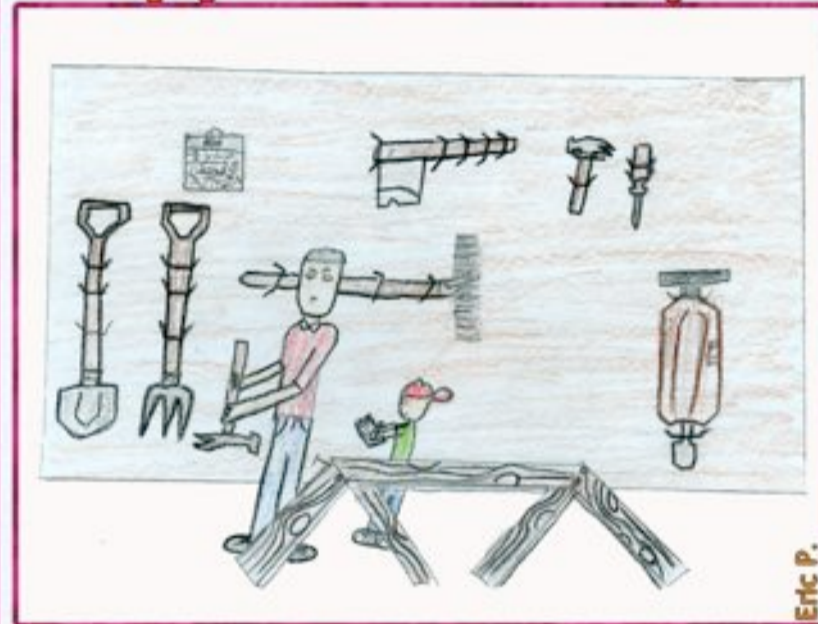
Writing in journals has multiple benefits for both teachers and students. Journals allow for students to not only express how they feel about things, but provide them with a chance to record information, feelings, or thoughts. This also allows them to do it in a safe private way where they won't have any concerns for people's reactions. Journals ensure a way for kids to write where there are no boundaries. Writing in journals has been proven to help kids with remembering details, organize thoughts, and storing memories. For teachers, it helps their students develop stronger skills, improved organized work, and develop a sense of creativity.

### Visualization and Guided Imagery



Using your imagination can help you combat stress, tension, and anxiety. Most people tend to release any tension in muscles, and relax. Then close your eyes, and begin to visualize a scene you find soothing. The more absurd the image is, the more memorable it is to the brain. This strategy is often used in teaching, because it allows children to use their imagination, and come up with ways to visualize things. It can help comprehend math and science, because you need to be able to transform abstract concepts into visual images in those courses. Visualization provides opportunities for students to develop vocabulary, and comprehend stories across the curriculum using imagination.

### Work-Study and Apprenticeships



Work study and apprenticeships are a great way to learn hands-on work. For instance, it is more difficult to learn how to wire electricity in a house if you're reading a book than if you were out there doing it yourself. Understanding how to do work yourself, and having the experience will beat what the textbook could ever teach you. Work study and apprenticeships are much more important for some jobs than memorizing facts. Textbooks are just to read and memorize facts; when you're doing things yourself, you practice how to do it.

### Reciprocal Teaching & Cooperative Learning



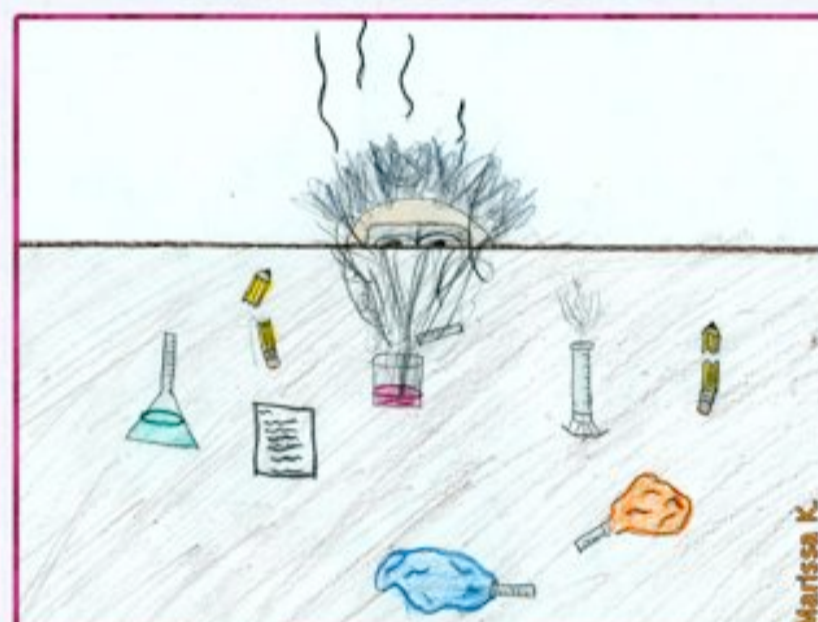
Learning itself is said to be social, rather than individual acts. Reciprocal teaching provides students to work in pairs or small groups, and they teach and learn from one another. Cooperative learning differs from group learning by having activities that have each student being responsible for mastering the material, as well as helping others master it. Reciprocal teaching and cooperative learning are effective skills that help retain knowledge because we learn 90% of what we teach to others. In this teaching method, students can view situations and problems from more than one perspective.

### Manipulatives, Experiments, Labs and Models



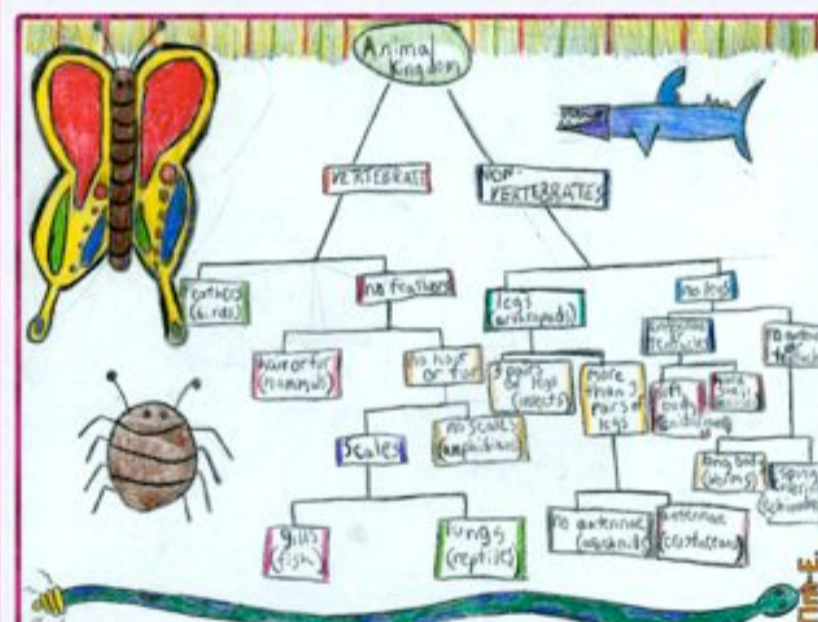
Bodily-kinesthetic people are known to learn more effectively through the use of their hands rather than traditional paper and pencil learning. They are more sensitive to touch, movement, and physical activities with each movement stimulating a certain area of the brain. This learning process, however, is not unique only to bodily-kinesthetic people; anyone will learn material more successfully using these models. By using their hands, students will find learning more enjoyable, more effective, and the process will also allow more oxygen to get to the brain, increasing learning capabilities. Stronger hand skills are additionally established which is essential for real-life and general physical activities.

### Project Based and Problem Based Instruction



People learn things best when what they are learning relates to something that they will use in real life. If you give a student a problem or project that they will use in their future life, they will work hard to get it done. If you give them a problem that does not have to do with the real world, they wonder, "Why do I have to learn this?" Most of the time they do not, unless that certain thing happens to seem interesting to the student. Studies show that the human brain is designed to only remember information that will make life easier. It is an instinct proven by science.

### Graphic Organizers, Semantic Maps, and Word Webs



Graphic organizers are a good learning technique, because it makes you use both sides of your brain. They help us make sense of the information and enable us to search for patterns. Some graphic organizers include word webs or semantic, mind, and concept maps. Once familiar with the techniques, students should be able to construct their own graphic organizers reflecting their own understanding of the concept. Mind mapping engages all the brain's functions and captures the total picture.

### Role-Plays, Drama, Pantomimes, and Charades



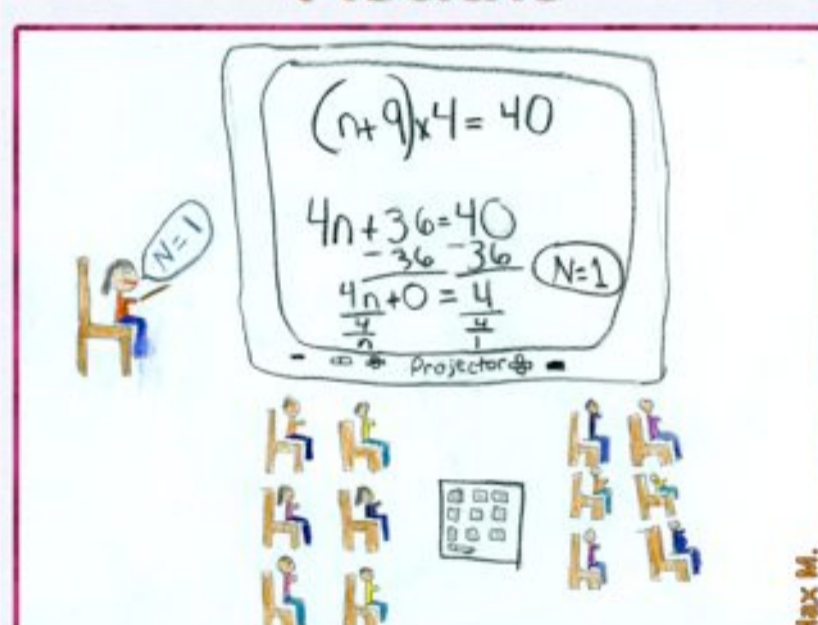
One of the weakest memory pathways in the brain is rote memory. This is why an instructional strategy such as a role-play is so important, because it links wrote information with movement, and places it in more than one memory path. Difficult concepts become easy to understand when students are active in the lesson being taught. Role-plays can be used for elementary school students learning the rotation and revolution of the planets or for high school students in learning properties of matter. Role-plays help students reach social, emotional, and academic goals. It makes learning more enjoyable and gives the choice of creativity.

### Movement



Teachers that use movement in their lessons have students that will get higher test scores. Studies show that kids who sit in their seats and take notes will not retain as much information as the kids who get up and move. When students move around the classroom or play with things in their hands, it tends to stick in their heads a lot more. Some examples of structured movement are role playing, and taking boards with words on them and forming them into sentences. During movement activities, students are acting out important concepts in learning. This stimulates the brain to remember each concept taught so that the students have an easier time studying for a test.

### Visuals



"A picture is worth a thousand words." It's not a lie; it's an incredibly true statement. Visuals used in classrooms can captivate the students' attention, reinforce what they need to know, and stimulate and maintain interest. A person who makes good visuals will ask their audience questions, and explain concepts. Research shows that ninety-eight percent of what the brain takes in is not a result of direct instruction, but comes in unconsciously. 90% of the brain's sensory input comes from visuals, so one of the most powerful ways to teach students is to present them with concrete visual images.

### Storytelling



Storytelling allows you to visualize what you hear, and you begin to get the ability to make learning easier. Telling young children a story motivates them to read. Story telling also introduces children to cultural values and literary traditions, before they can read and write themselves. Students will read more fluently at greater understanding of literature. Imagery speeds communication within the brain and brain cells. Children will get more out of a writing assignment or reading assignment when the lesson has more background information followed with discussion afterwards.

### Humor



Humor is a valuable tool in the classroom. Humorless teaching styles and sarcasm do not grab the student's attention. Studies demonstrate that when a teacher begins a lesson with a joke, students are more interested in learning. As a student is having fun in the classroom, self esteem is boosted, and they retain the memory of the lesson longer. Laughter also reduces stress and actually boosts the immune system increasing white blood cell activity. Students take in more information when they enjoy what they are hearing, while retaining less of the information when teachers cram information into their brains. The result is improved test and quiz grades along with a happier student.

### Brainstorming and Discussion



In today's settings, both teachers and students greatly benefit from the outcome of brainstorming and discussion. For teachers, the process of brainstorming helps them to understand what needs to be assessed and assigned for their students to improve not only their vocabulary, but to develop a sense of creativity. In discussion, a plan is written for identifying problems that will eventually be answered in the solution section of the process. Also, specific plans are adjusted so that if any problems are encountered, they will be thoroughly prepared to answer them. Students can greatly benefit from brainstorming by talking collaboratively so that all ideas are expressed.

### Artwork and Drawing



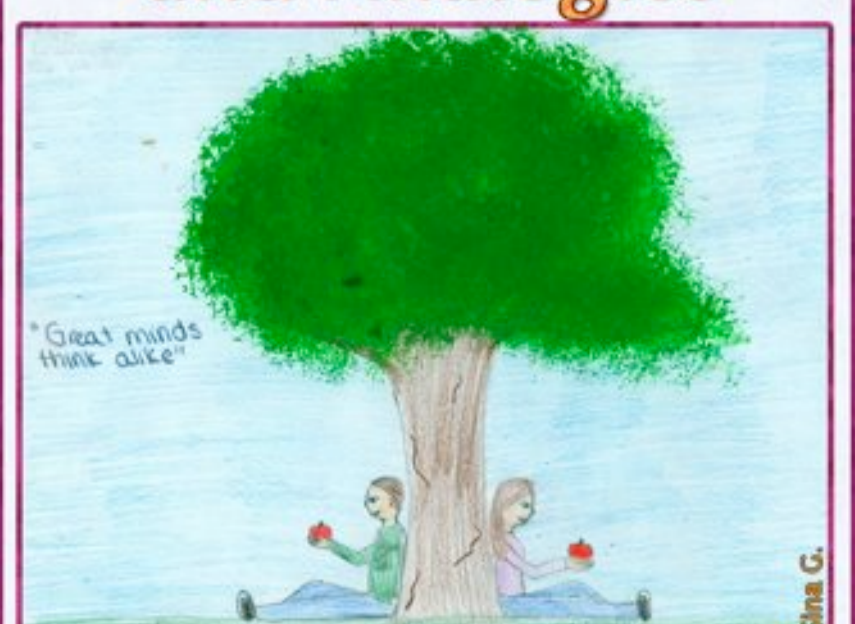
When students don't understand what you are telling them, artwork is a good way to show them. When it comes to test time, instead of remembering the teacher's words, you can think back to what you drew about the subject and why you drew it that way. You are more likely to remember the definition of a word if you draw it rather than if you look it up in a dictionary. Different types of art activate different parts of the brain. Research has proven that in classrooms that use more artwork, their students tend to get better test scores.

### Music, Rhyme, Rhythm, and Rap



Using music, rhyme, rhythm, and rap are very effective ways for students to study. Music works as a strategy for teaching kids because the song often gets stuck in the student's head, causing them to say the information over and over again in their brains. This effect is what is called an "earworm". This helps because every time the student sings the song, it gets remembered as information in their brain. When you take a "catchy" song and change the words with educational concepts, the student will learn the concept much easier than if they have to study by rote memory.

### Metaphors, Similes, and Analogies



Metaphors and similes are descriptive comparisons between two things. This helps the average student learn due to the fact that the brain is always looking for connections to other things. Students will then be able to make a picture in their mind of what it looks like and apply it to new concepts. Metaphors and similes not only link easy concepts to difficult ones, but they help children develop a sense of creativity. Analogies are topics that are similar but different in some aspects. This can also help the average student develop a free thinking mind. Metaphors, similes, and analogies help students relate things to other topics making it easier to learn.