



## EDUCATIONAL MODEL

### Socratic Method

SURGE Christian Academy utilizes the Socratic Method as the framework of its overall educational model. It consists of teacher-directed instruction – inquiry based learning that develops and enhances students’ critical and creative thinking skills across the curriculum.

This approach is the oldest and still remains the most powerful teaching tactic for fostering critical thinking. Within the framework of scientific skepticism, the process of critical thinking involves acquiring information and evaluating it to reach a well-justified conclusion or answer. Part of critical thinking comprises informal logic. However, a large part of critical thinking goes beyond informal logic and includes assessment of beliefs and identification of prejudice, bias, propaganda, self-deception, distortion, misinformation, etc. Given research in cognitive psychology, many educators believe that schools should focus more on teaching their students critical thinking skills, intellectual standards, and cultivating intellectual traits (such as intellectual humility, intellectual empathy, intellectual integrity, and fair-mindedness) than on memorizing facts by rote learning. SURGE Christian Academy believes that critical thinking is important, because it enables a student to analyze, evaluate, explain, and restructure his or her thinking, decreasing thereby the risk of acting on, or thinking with, a false premise.

In the Socratic method of instruction, teachers at SURGE Christian Academy focus on providing students with questions - not answers. Teachers model an inquiring, probing mind by continually probing students with questions. Teachers focus on the element of reasoning in a disciplined and self-assessing way.

The Socratic Method is simply, a conversation, a discussion, wherein two or more people assist one another in finding the answers to difficult questions. Why did Socrates proceed in this manner? Despite his many claims of ignorance Socrates understood better than those with whom he spoke that it was not enough simply to "learn" facts, to memorize lessons, or to parrot lectures. To know truly, to seek wisdom, one must work toward understanding. If the question of "what" leads us to see what we do and do not know, then the question "why" leads us to understand our world in a more full and fundamental manner.

The Socratic Method is also can be viewed as a dialectic method of inquiry, largely applied to the examination of key moral concepts and first described by Plato in the *Socratic Dialogues*. For this, Socrates is customarily regarded as the father of Western ethics or moral philosophy. It is a form of philosophical inquiry.

The practice involves asking a series of questions surrounding a central issue, and answering questions of the others involved. Generally, this involves the defense of one point of view against another and is oppositional. The best way to 'achieve closure' is to have the opponent contradict themselves in some way that proves the inquirer's own point, but most importantly have the opponent ponder about his or her point of view or in the errors of his or her reasoning. The Socratic Method teaches by using a series of questions and answers which the logical soundness of a definition, or a point of view, or the meaning of a concept, is tested.

SURGE Christian Academy teachers select materials in their lessons that contain ideas that are abstract. Indeed, these ideas may, and will, mean different things to different students. There may not be one correct answer, but several interpretations are possible. For example, Socrates asks, in Plato's Republic, what is "justice?" As Socrates' queries of his students reveal, "justice" as a concept that has several definitions or meanings, according to one's viewpoint or broad interpretations. The students are then, encouraged to express their own opinion or belief in a logical, thoughtful, and constructive manner.

At SURGE Christian Academy we believe that the ability to reason, to analyze logically, will survive long after the student's retention of memorized facts are lost. Our belief is that "truth" is a dynamic concept that evolves over the course of one's existence. It is never static. "Truth" transforms as new evidence or facts are presented. What may be considered "truth" in your universe and in a specific time or place may be considered non-existent in another. "Truth" is a matter of one's acceptance and the realization that one is at peace with his or her understanding of the subject matter. The Socratic method of learning is based on logical analysis which develops superb reasoning skills in students. A student's understanding is greater to the degree that his or her account is the one that comes closest to the cause itself.

For example, if a student tells you that the square of the length of the hypotenuse equals the sum of the squares of the lengths of the other two remaining sides (Pythagorean Theorem), he or she would, of course, be correct. But if you ask this student "why" this is so, would he or she be able to give you that answer? If he or she cannot, then he has memorized an "answer" that, while possessing certain utility, does not of itself provide understanding of causes or the concept. But if he gives any one of a number of reasoned explanations why the right triangle has the property described, then he demonstrates not only his understanding of causes, but also the ability to communicate that understanding to others. Indeed, conceptual learning based on inquiry provides a student with longevity in the knowledge that is attained, remembered, and above all understood.

Hence, the discussion method facilitates a student's quest for understanding by requiring him or her to answer questions on his or her own, to ponder the validity of what others have said or written, and (not the least of which) to give reasoned support for his or her own opinion to the other students in the group. While the discussion method is a powerful tool, it is by no means the only activity by which people learn.

There are three distinct activities or intellectual skills by which learning takes place:

1. The first type of learning activity is to memorize material, and while memory skills are essential to learning, what one memorizes, one can also forget.
2. The second activity is the development of intellectual skills such as adding, reading, and writing.
3. The third method draws on the foundation of the first. For example, since one learns to read by reading, there are certain rules of phonics which are memorized that assist in the process.

Development of these intellectual skills is best carried out when the ratio between the number of students and teachers approaches closer 1 to 1. Teaching a young child how to write a cursive "a" takes some time and attention. Teaching 24 to 30 children at the same time how to do the same task is simply not efficient. Accordingly, it becomes evident that students are unique in the way they learn. They have their own learning, as well as way to the method of understanding. Indeed, the activity of increasing understanding is above all the essence of education and paideia ("educating the whole student").

The activity best suited to developing understanding is participation in a principled discussion among other students who challenge one another to think as they all search for truth together. For at SURGE Christian Academy we believe that each student does not forget that which the student understands, and when the student understands both the world he or she lives in and his or her true place in it, he or she is then, empowered with the ability to choose rightly for his or her own betterment and the betterment of those around him or her. The students at SURGE Christian Academy are eager to participate in classroom discussions, and their verbal skills are outstanding as are their reasoning abilities.

Students are taught:

- a. on the values that hold societies together,
- b. to appreciate the nuances of language,
- c.. how to analyze and challenge what they read,
- d. to express their opinions,
- e. to contrast their ideas with differing or similar ones as expressed by other students.

**Aristotle's Process:**

SURGE Christian Academy use of the Socratic Method of education of a student will also depend on Aristotle's three-part process training of the mind or modes of persuasion. First, a student absorbs knowledge - information and language mechanics (grammar/structure) - that systematically constructs the foundations for logical reasoning (The Development of the *Logos*). Second, the student develops the skills to utilize the knowledge - information and language mechanics (grammar/structure) - that has been learned in order to think through arguments or engage in dialects that result in the development of one's unique character or identity (The Development of the *Ethos*). Lastly, through the exposure of various interactions and experiences the student learns to express him or her-self through the use of one's affect, feelings or emotions as distinguished from cognition, thought, or action. As a result, the process of a student's interaction, manipulation, and application of knowledge then, becomes clearly defined (The Development of the *Pathos*).

Throughout each year of a student's education, each student begins a process of development, maintenance, and enhancement of his or her language(s). This process can be characterized as the process of "language acquisition"- not because the student spend years learning the mechanics and structures of reading, conversing, and writing but because these are the years in which the building blocks for all learning are laid. In the elementary school years - the mind is a "tabula rasa" blank slate or a sponge. It is ready to obtain or absorb information (knowledge). Children at this age actually find memorization challenging: rules of phonics and spelling, rules of grammar, poems, the vocabulary of a foreign language, the diverse stories in history and literature, descriptions of plants, animals, and the human body, the facts of mathematics - the list goes on and on.

At SURGE Christian Academy, our belief is that students can learn to think analytically, even at an early age. The advancement in technology and styles of learning in today's society has made it possible for students at any educational level to develop, maintain, and enhance his or her ability for self-expression and self-discovery. Using archaic developmental models as timelines or guides can only hinder, delay, or curtail the educational performance and advancement of a student. Jean Piaget's stages of compartmentalizing cognitive development based on specific ages and milestones cannot be viewed as the only standards by which educational theorists abide to. We must take into account the time, place, or history in which any research had been conducted. Currently, our society has made technological advancements that can assist students to escape from the rigid stages of Jean Piaget. We must also note that Piaget's stages are based on the individual's perspective through which cognition is developed, maintained, or enhanced through the interaction and manipulation of his or her own environment. The assumption here is that learning takes on a static form.

As a result, the type or style of interaction that is encountered by the learner is secondary in importance. We might even conclude that Piaget's theory of cognitive development has a form that is similar to the Theory of Adaptation. The end result may clearly be stated that a student becomes a product of his or her environment through adaptation, a survival of the fittest mentality. Indeed, the theory fails to take into account the quality of the interaction the student is exposed to or is engaged with. Is the interaction passive or active? And, is the individual reactive or proactive to the interaction presented to him or her?

Indeed, each student is unique, even his or her experiences and his or her interpretations of those experiences can be classified as being diverse, when compared to any other student his or her own age. The question that seems to remain unanswered is: Should the acquisition of knowledge be based on a student's mental development or should it be based on the unique quality of the experiential learning process of each student.

The use of SURGE Christian Academy teaching methodology assists students to share and utilize their own unique experiences and learn from each other through the development and the use of Aristotle's three modes of persuasion in order to disseminate that knowledge:

1. *Logos*        (*Logic/Knowledge*),
2. *Ethos*        (*Ethics/Skill*), and
3. *Pathos*       (*Emotion/Affect*).

The Socratic Method of Learning and Aristotle's modes of persuasion are more than simply a pattern of learning and thought. These methods are language-focused; learning is mostly accomplished through words, written and spoken, the use of imagery is secondary. When a student experiences moments of inspiration, learning becomes a visual representation in the mind that then, is translated to something concrete. Allowing the mind to develop images of thought can greatly enhance a student's abstract and critical thinking skills.

Why is this important? Language learning and image learning require very different habits of thought. Language requires the mind to actively work harder; in reading, the brain is forced to translate a symbol (words on the page) into a concept. On the other hand, images allow the mind to become a passive observer. In front of any visual medium, the mind can "sit back", relax, and absorb. On the other hand, the mind that is faced with the written page is required to work. Indeed, both language and image learning are necessary.

These Methods of Learning, then, have two important aspects. First, it is language focused. And second, it utilizes imagery as a tool for learning. Indeed, our belief is that imagery learning cannot be substituted for language-focused learning, because it follows that the mind must be supplied with language, facts, concepts and images or experiences in order to develop analytical or logical thought (*Logos mode of persuasion*), then given the logical tools or skills for organization of language, facts, concepts and images or experiences that can be utilized in discussion, debates, and/or dialogues (*Ethos mode of persuasion*), and finally equipped to express conclusions through the use of persuasion and emotion (affect) of beliefs (*Pathos mode of persuasion*). But that isn't all. To the Socratic and Aristotelian mind, all knowledge (language and imagery learning) is interrelated. Astronomy (for example) isn't studied in isolation; it is learned along with the history of scientific discovery, which leads into philosophical relationship to science and from there to the intricacies and beliefs of various cultures.

For instance, the reading of Homer's *Iliad and Odyssey* leads a student into the consideration of Greek history, the nature of heroism, the development of the epic, and man's understanding of destiny, fate, family, and sacrifice. Through the use of language and imagery the student is able to relate and understand the experiences encountered by the characters in the epic hence, empathy is conceptualized and applied in the learning process.

This is easier said than done. The world is full of knowledge, and finding links between fields of study can be a mind-twisting task. In the Socratic Method of Learning in concert with Aristotle's modes of persuasion this challenge is confronted by taking the discipline of Philosophy and History as its organizing outline - beginning with the ancients and progressing forward to the moderns in art, literature, history, mathematics, music, physical education, and science. The beauty that exists in the Socratic Method of Learning and Aristotle's modes of persuasion are that they both dwell on one problem, one author, or one epoch long enough to allow even the youngest of student a chance to exercise his or her mind in a scholarly manner: to make connections and to trace developments, lines of reasoning, patterns of action, recurring symbolisms, plots, and motifs. It allows a student to engage in the learning process and retain knowledge that can be comprehended, applied, analyzed, synthesized, and evaluated throughout one's entire life span. It allows acquired knowledge to be applicable to every day events, rather than memorized and forgotten after each assessment. Mastery gained on a specific area of study should be continuous, not temporary. The love for learning should be a life-long process.