

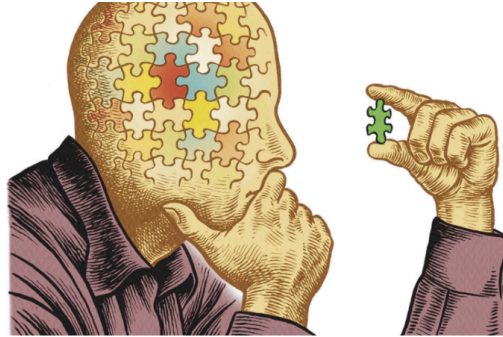


ASHBROOK INDEPENDENT SCHOOL

To Challenge and Nurture Academically Capable Students

From the Office of the Head of School, Dr. Christopher A. Schoberl

Is it Monday Yet? 5/31/24



The Critical Importance of Critical Thinking at Ashbrook School: Part I

Lessons that incorporate critical thinking are a hallmark of an Ashbrook education. Understanding how to engage in the disciplined process of actively analyzing, evaluating, and synthesizing information gathered from observation, experience, reflection, reasoning, or communication is a vitally important skill for our young Explorers to acquire as they continue their studies and then step into leadership positions in the world they will inherit.

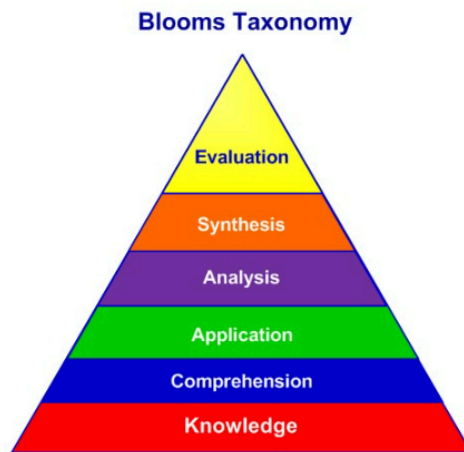
Unfortunately, most schools do not take the time to train students in these skills, many spending time exclusively on lower order thinking skills instead, as a way to make sure they are able to march through one or another content driven curriculum framework docs to which they are held accountable for contracts and funding (a relentless slog called AYP for Annual Yearly Progress). The problem with this strategy, however, is that students spend all of their time learning WHAT to think, and very little time on HOW to think. In fact, researchers discovered that it would take about 18 years of schooling, using a typical content driven framework integrated with skills training in critical thinking, to get through a typical K-12 curriculum.

So, how do Ashbrook teachers do it? Through collaboration with each other, oversight provided by our awesome Assistant Head of School Rachel Sechler, guidance from curriculum maps that define discipline and cross grade integration, objective data of standardized testing, anecdotal information collected from parent conversations and surveys throughout the year, and a healthy amount of teacher autonomy; in short, they make a lot of really good decisions about what content to teach.

Choosing this content is hard work and takes a lot more thinking than simply teaching EVERYTHING. When lesson planning, our teachers will ask themselves, “What do I need to teach to ensure that my students are ready for the next grade, from the perspective of “the WHAT” they should know? Where are the opportunities, given this content, for them to analyze and synthesize for a deeper understanding of the bigger picture based on content that I chose to directly teach? How can this bigger picture help them to derive knowledge and understanding that I do not directly teach? These are complicated questions and take a long time to answer. In the end, the content that is directly taught is referred to as generative, because it allows our students to do the deeper level thinking they need to do as critical thinkers, vs. what has been called “empty vessel teaching,” which is efficient, but very ineffective in terms of training students to think critically.

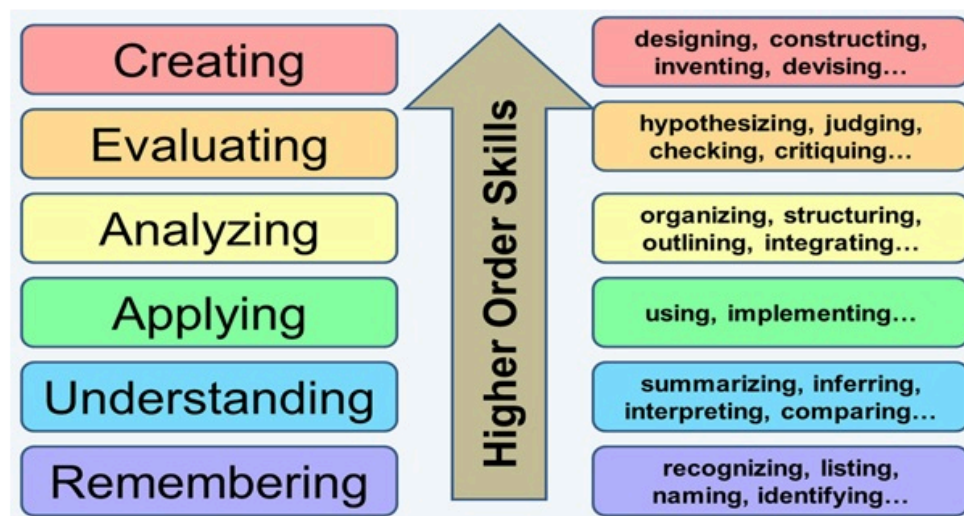
In this model, the Latin root of the word “education,” *educere*, speaks to “the bringing forth” of what students understand, vs. merely asking them to spit back what they know or are able to comprehend. Make no mistake, acquiring knowledge and developing comprehension are important, but schools should not stop there; there is so much more to teaching than mere knowledge acquisition. Unfortunately, given the accretion of content that has developed through decades of merely adding content to typical curriculum frameworks, driven in part by the relentlessly fluctuating political winds, swinging pendulum of administrative changes, flavor of the month best practice research, commercial interests, and bottomless pit of “new and improved” teaching methods, there just is not enough time in the day to ALSO teach critical thinking.

One of my favorite ways to think about critical or higher order thinking is represented by [Bloom’s Taxonomy](#). Benjamin Bloom, a cognitive psychologist working at the University of Chicago in the mid 1950s, really hit the nail on the head with thinking about critical thinking in ways that have passed the test of time. Indeed, most educators today know of Bloom’s work, though many do not have the time to plan lessons according to the best practice that helps students not only know WHAT to know, but HOW to think. For these teachers, Blooms is a nice theory, but not put into practice.



The basic or lowest level in the taxonomy deals with simple knowledge acquisition. At this level, people simply memorize, recall, list, and repeat information. The cognitive complexity grows at every level. At the highest levels, people are able to build a mental structure from diverse elements and are able to put parts together to form a whole, as well as make judgments about the value of ideas.

As a way of operationalizing Bloom's for the classroom, many teachers who do use Bloom's, have published internet resources such as this six level taxonomy synced with the original.



For teachers who want to learn how to incorporate these ideas into their classrooms as they are at Ashbrook School, there is no end to professional development, on line and life. For example, the Harvard Graduate School of Education offers programs such as the Project Zero Classroom or their Teaching for Understanding workshops, which draw

heavily on the Multiple Intelligences work of Howard Gardner. Versions of these same ideas can also be learned by teachers who choose to attend a UbD (Understanding by Design) workshop, thinking pioneered by Jay McTighe, but no matter what you call it (higher order thinking, critical thinking, or understanding), it all boils down to the same thing: simply knowing is NOT the same as understanding.

Much more than mere comprehension, critical thinking involves questioning assumptions, discerning hidden values, evaluating evidence, and assessing conclusions: ultimately arriving at one's own relationship with the information they know, and one's own opinion. At its core, critical thinking is about being curious, skeptical, and open-minded, while maintaining a commitment to reason and evidence, leading to a fuller understanding of the information. So, for example, in studying a moment in history, Ashbrook students will of course KNOW all about the moment, but will also possess a deeper understanding of that moment because they will have had a chance to evaluate the intentions of the author of that history, appreciate alternative viewpoints and perspectives, and engage in the metacognitive exercises that will allow them to think about what THEY think about this moment and how the various rhetorical tools used by the author have impacted them.

One of the fundamental aspects of critical thinking is its focus on clarity and precision. This requires individuals to clearly define terms, articulate questions, and present arguments in a logical and coherent manner. This not only improves communication but also ensures that ideas are understood accurately and without ambiguity. In this vein, Ashbrook students are often asked for their opinions and expected to express those thoughts with this kind of precision vs. fuzzy thinking or generalizations that dodge the need to speak and write with conviction. Moreover, critical thinking emphasizes the importance of relevance and depth, encouraging individuals to dig deeper into issues rather than accepting superficial explanations. Unfortunately for many students in this country, the content they are taught through mandated curriculum framework documents are often described as "an inch thick and a mile wide," because they simply do not have the time to go deeper.

Training students in critical thinking is vitally important for several reasons. First and foremost, it prepares them to navigate an increasingly complex and information-rich world. In the digital age, where misinformation is rampant, the ability to critically evaluate sources of on line content is crucial. Students equipped with critical thinking skills can discern credible information from unreliable or biased sources, enabling them to make informed decisions in their personal and professional lives. Typical Ashbrook lessons of evaluating websites and assessing validity of information ,focus on this level of healthy skepticism.

Furthermore, critical thinking fosters problem-solving abilities. By learning to approach problems methodically and creatively, students can develop innovative solutions to the challenges they encounter. This is particularly important in a world where the nature of work is rapidly changing, and the ability to adapt and solve novel problems is highly valued. Employers seek individuals who can think critically, as they are often more adept at troubleshooting, strategic planning, and making sound decisions under pressure. Indeed, these are the skills that are tested in Ashbrook's annual Rube Goldberg Machine Challenge, an experience that allows students to engage in novel problem solving scenarios, but that probably takes a lot of time from the content driven curriculum most teachers are accountable to (which is likely why we have a GREAT DEAL of trouble attracting other schools to compete, despite sending out 100s of invitations). As employers themselves, our students will be able to better supervise, oversee, and lead others doing the work they have chosen. In the context of leadership, critical thinking is indispensable. Leaders who can think critically are better equipped to make strategic decisions, anticipate and mitigate risks, and inspire and motivate others. They are able to navigate complex organizational dynamics and drive positive change. As future leaders, Ashbrook students trained in critical thinking will be able to guide their communities and organizations with wisdom and foresight.

Ultimately, and perhaps most importantly, critical thinking promotes intellectual independence. It encourages students to think for themselves rather than relying solely upon the perspectives of authority figures or popular opinion. This independence is essential for the development of an informed and engaged electorate who are fully able to contribute to a democratic society. By questioning and challenging established norms and beliefs, critical thinkers can drive sensible social and political change, advocating for justice and equity. Moreover, critical thinking enhances personal growth and curiosity. It instills a love of inquiry and a desire for continuous improvement. Students who are taught to think critically are more likely to be lifelong learners, adapting to new information and experiences with an open and analytical mindset. This lifelong learning is crucial in a world where knowledge and technologies are constantly evolving.

Critical thinking is a foundational Ashbrook skill that empowers individuals to analyze information, solve problems, and make informed decisions. The time Ashbrook teachers take to train our students in critical thinking is essential for their personal and professional development, as well as for the advancement of society, our country, and the world as a whole. By fostering critical thinking, Ashbrook is equipping our students to lead the world they will inherit with insight, innovation, and integrity.