

Creating Critical Thinkers

Education is a field that is constantly experiencing changes. Teachers are never truly done with their schooling as they are lifelong learners working in an ever changing field. Perhaps the best way to evaluate our education system is by looking at it's graduates, or more generally, members of society. In fact, according to critical thinking researcher, Edward M. Glaser, over one hundred and fifty years of public education in the United States have produced a mostly literate society, however these citizens are not all able to think critically about what they have read (pp. 4-5). Critical thinking, and thus the ability to innovate, problem solve, and create change, has become a necessary skill to keep our society moving forward into the future. In this day and age, our world is faced with many global issues including climate change, proliferation of nuclear weapons and most recently, a global pandemic. These critical thinking skills will assist our future innovators in creating positive changes in relation to these ever present global issues. According to leading scholars and the American Philosophical Association (APA), to think critically, one must be inquisitive, flexible, and well-informed (Facione, p. 2). Thus, to create critical thinkers in today's classroom, and prepare our world's future innovators and problem solvers, we must focus on teaching inquiry, fostering collaboration, and engaging students in learning.

For many years, teachers have been taught to ask students questions in hopes of getting them to answer said question. In order to teach students to think critically, however, we must teach them to question, or inquire, as opposed to simply answering. Answering questions with the same answers that have been heard for years will only attempt to solve problems the same ways that have been tried before. As Warren Berger writes in his book *A More Beautiful Question*, when someone poses a question, they are "making...mental connections, they're seeking more information and clarification by way of questioning," (p. 41). These mental connections will allow individuals to push themselves further in identifying and solving world problems, developing new ideas, and pursuing possible changes and improvements to our ever changing world.

We must also bring students together in collaboration to grow them into being open-minded. Without teaching students how to work in small groups, large groups, or partnerships, they might not be willing to consider new ideas or viewpoints that could aid them in thinking critically, and thus solving world problems. In fact, numerous studies have shown that collaborative learning encourages the development of critical thinking (Gokhale, 1995). According to Vygotsky (1978) in particular, students are capable of performing at higher intellectual levels when working in collaborative situations than when working individually. Collaboration could be the difference in attempting to solve major world issues.

Perhaps every teachers' ultimate goal on a daily basis is to engage their students. No matter kindergarten or college, keeping students' attention can be an obstacle yet it is a necessary battle to fight. However, engagement can look and sound different for every student, and subsequently every teacher as well. According to Shcheglova and Parshina, "classroom

participation appears to be the strongest predictor of critical thinking, which confirms the necessity to intensify the effective classroom practices” (p. 11). Imagine passive, unengaged employees on a problem solving team for a major company - the team is likely going to struggle. Promoting engagement in school is vital, not only to teach students these critical thinking skills while they are in school, but also to prepare them for their future careers.

To accomplish these goals and focus our teaching more intently on teaching critical thinking skills, education must experience yet another change. This change will come from everyone from policy-makers, administrators, teachers of all levels, parents and especially students. All of these stakeholders must work together to provide students with the opportunities to learn how to think critically. We must shift the focus from simply answering questions, being responsible for only your learning, and memorizing content, to inquiring, collaborating, and engaging – thinking critically. Then, our students will be prepared to enter society with the abilities to innovate, problem solve, and create change, ultimately making our world a better place.

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