

Issue XXIV

# STEMBoost Newsletter



Brought to you by the STEMBoost Editorial Team

## Fun Fact:

How long do ginkgo trees live?

## Quick Summer Update!

Joseph Lee, Editor in Chief

As the 5th annual STEMBoost workshops come to a close, officers attended a leadership training workshop this month, led by a parent volunteer, Ms. Xi Tian.

The meeting kicked off with newly elected officers voicing their work in the past year and the plans they had going forward. Some topics discussed included maintaining the popularity of our most successful workshops, proctoring work for competitions hosted by the organization, increasing our online presence through the newsletter, and even teaming up with other organizations, both local and overseas.

During the leadership workshop, Ms. Tian led us through team bonding activities, and we began to discuss the vision and mission for our organization, and how we could put ourselves on the track to shaping it in ways that we wanted. Thank you so much to Ms. Tian for this inspiring educational opportunity!



# Should Education Be Built on Competition?

Irene Tian, Editor

Competition is deeply rooted in civilization. It has served as the driving mechanism since our evolutionary past to the dominant ideology in much of the world today. Its implementations and impacts have since been met with a variety of different reactions. While widely regarded as the most practical solution to the problem of resource distribution, it has gone under scrutiny of sociologists and psychologists alike for its far-reaching effects. Growing evidence on the impacts of competition has raised a widely disputed question on whether or not competition should remain as the core of most education systems. Although many credible theoretical takes have been discussed, reality is unlikely to change. However, understanding the effects of competition in education may provide a change in perspective, allowing anyone to make personal adjustments for a better education experience.

Much of the education system is centered around college admissions. To many students, college admission has lost its appeal as an opportunity and a goal, instead becoming a poorly understood expectation for many young children and a source of a fear of being stigmatized. Many high school student lives seem to revolve around getting into a good college, and even younger students will begin thinking about it. At the extreme, students become more like projects than humans, constantly improving and tailoring themselves to be presented to their dream college. While many consider themselves relatively free from the constraints of authority, students constrain themselves into becoming their desired product. On the other hand, many argue that students are able to achieve a balance that leaves room for them to live their lives.

Some consider competition effective for a variety of reasons, including its ability to reveal and reward those who have made great achievements. This allows students to showcase their skills, abilities, and efforts, giving them an opportunity to respect and learn from experts in their areas.

However, others argue that competition decreases the effectiveness of education by preventing cooperation: rivals are less likely to share resources and help each other. On the contrary, team-based competitions can encourage students to communicate and collaborate.

Competition serves as a form of extrinsic motivation, where students are motivated by external factors instead of by internal rewards. An example of intrinsic motivation would be enjoyment from learning about an interesting subject. Those against the domination of extrinsic motivation in childhood point to the data that has shown intrinsic motivation to result in better performance. However, competition, like other extrinsic motivators, can also drive and help in the development of intrinsic motivation. In reality, it seems that a balance must be maintained between intrinsic and extrinsic motivation, between complete freedom and structure.

Although competition has been identified as a method of motivation, multiple studies have also concluded that involving competition in an educational setting diminishes performance and learning experience. Not only does it take away the opportunity to cooperate and learn from others, but by setting the goal of beating others, their focus shifts away from the actual learning. Unfair practices that neglect learning are often implemented as a way to climb over others.

Another practical argument for competition in education claims that it prepares students for the inevitable competition ahead of them, where stakes are even higher. In theory, the earlier children experience competition, the earlier they learn how to cope with defeat. Competitiveness is often considered as an innate human desire: young children naturally seek enjoyment in beating each other, creating informal contests as a common pastime. Cooperation is also innate; humans evolved to be socially altruistic in order to survive their physically superior predators. Although educational competition usually does not result in physical damage, its consequences on mental health are no less severe.

While encouraging improvement and respect among peers and providing a benchmark for personal achievements, achieving a lower rank may lead to self-doubt and a multitude of other self-esteem issues. Winning only rewards students with pride, a fleeting feeling that piles even more pressure on students to enter the cycle of seeking triumph. The extreme pressures of competition have been known to cause a decrease in self-esteem and an increase in suicidal thoughts in students around the world. Meanwhile, cooperation seems to promote higher levels of self-esteem while aiding in a healthier process of determining one's self-worth.

Realistically, it would take an unlikely amount of convincing, coordination, and restructuring to center achievement in school around something else. While there doesn't seem to be a practical alternative to competition yet, students, teachers, and parents can benefit from recognizing the many effects of competition in education and adjusting their learning experience to fit their own abilities and opinions.

Sources Used:

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<https://ncspe.tc.columbia.edu/working-papers/files/OP35V2.pdf>

<https://science.jrank.org/pages/1652/Competition.html>

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Answer:

A ginkgo biloba tree can live for up to 3,000 years! According to scientists, the species doesn't show signs of natural aging.