

Career Technical Education and Esports

Esports is competitive, organized video gaming where competitors from different teams face off playing popular video games. These gamers are followed by millions of fans all over the world, who attend live events or tune in online. But what does this have to do with education?

The esports movement is beneficial in educational ways that may not occur with involvement in traditional sports. For one, when teachers incorporate esports into their curriculum, they allow students to learn how to appropriately use technology. Students who might not otherwise have access to sophisticated technology, can now use high-performance computers and learn the essentials to using gaming platforms to compete and collaborate.

Colleges are following this trend and forming esports clubs and teams to capitalize on the impact it may have on the future careers of their students. Starting from just one program at Robert Morris University-Illinois in 2014, collegiate esports programs now number in the hundreds: many are actively recruiting athletes and offering millions of dollars in scholarships, while some are even creating degrees in esports.

Over 90% of collegiate esports programs have joined the National Association of Collegiate Esports (NACE). However, other leagues like Collegiate Starleague (CSL), Tespa, and Electronic Gaming Federation are competing in the space. Even game developers are jumping into the mix; Riot Games launched its own governing body, the Riot Scholastic Association of America (RSAA), in May, 2019.

The CEO of High School Esports League (HSEL), Mason Mullenieux, believes that STEM majors connect on a deeper level than simply an interest in computer science and likens succeeding in esports to a science or math problem, with their problem-solving goal-orientation.

Naturally, students that major in STEM are drawn to STEM careers, which according to the US Bureau of Labor Statistics, have higher wages than the national average. Computer-related occupations are the largest projected category of new jobs between now and 2024.

The field of esports can offer students the academic and technical skills necessary to succeed in STEM and non-STEM related learning opportunities and careers. The North America Scholarship Esports Federation (NASEF) is developing a Career Technical Education curriculum (CTE) that involves a multiyear sequence of courses for students in grades 8-12 that will integrate core academic and technical knowledge with 25 courses and a curriculum that will provide pathways to at least 15 CTE-related careers.

Offering esports is a smart way for high schools to encourage students to pursue careers in STEM and CTE fields. Students who are drawn to gaming are often equally interested in technology in general. In 2018, Riot Games Director of Collegiate Esports said that nearly two-thirds of their League of Legends players were majoring in STEM fields. "Although we don't think there is one type of student that makes up top League of Legends talent, 62% of our participants are from STEM majors." This number compares to the national average of 36% of undergraduates who are in STEM majors.

When students take part in esports in school, coaches can nurture a passion for CTE pathways such as STEM and guide students to explore STEM careers. Colleges with a strong esports culture tend to offer

robust STEM curriculum. Shawnee State University in Portsmouth, Ohio, for example, is a pioneering leader in game design and esports competition. The university offers a BS in gaming programming through the Engineering Department as well as a BA in Game Art through the fine arts department. The school also offers a minor in game design.

For high school students interested in esports, there are many opportunities to attend colleges with esports teams. In 2016, there were seven colleges and universities with esports program, and by 2018, 63 institutions had esports programs.

Partnering with the flourishing UC- Irvine collegiate program, NASEF (North American Scholastic Esports Federation) is particularly popular in California school districts like Orange County. Their mission focuses on equity and the career skills of esports stating, "To provide opportunities for ALL students to use esports as a platform to acquire critical communication, collaboration, and problem-solving skills needed to thrive in work and in life." To support that mission, they provide a free ELA and CTE curriculum.

Esports may also be integrated into high school English Language Arts curriculum. The University of California developed high school English courses that build ELA skills while students develop specific skills for an esports career, with courses ranging from Game Design and Entrepreneurship to Marketing and Hospitality.

In short, an investment in esports means an investment in technology. Esports purchases could, therefore, be leveraged to enhance CTE offerings. This familiarity with modern technology could help students better prepare for 21st century jobs (both the jobs of the modern workplace as well as the jobs that haven't yet been created) as well as forging a potentially viable career in esports themselves.