

1 **Esports as a STEM Program**  
2 **Discussion Paper**  
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5 **Background**

6 Esports is a growing field of competition that combines science, technology, engineering, and  
7 math (STEM) with many of the traditional benefits of organized sports. The United States  
8 esports industry is worth more than \$1 billion dollars and is rapidly gaining a mainstream  
9 following. Colleges and universities are offering scholarships to esports athletes, and new careers  
10 related to professional gaming (either in professional esports leagues or through various  
11 streaming platforms) are becoming increasingly prominent.

12 The STEM learning component of esports gives youth an opportunity to study computer  
13 hardware and software, digital interface and user interface programming, and programming and  
14 design concepts for digital games. Additionally, the benefits of participating in esports include  
15 collaboration, communication, creativity, as well as strategic and analytical thinking. Among  
16 these benefits, esports helps participants foster self-confidence, cultivate teamwork, and build  
17 problem-solving and critical soft skills.

18 *Harvard Business Review* states that by 2024, as many as 50 percent of jobs will likely be  
19 automated, so employers will seek candidates who are able to learn adaptively, make good  
20 decisions, and work well with others. Therefore, students who practice soft skills by playing  
21 esports may also develop important competitive advantages that will benefit their future  
22 academic and professional careers.

23 Various curricula exist to promote relevant, modern workforce skills development through an  
24 esports format that may be more attractive to youth who are not interested in more conventional  
25 training methods. Increasing access to educational opportunities and approaches to playing  
26 esports would offer youth a gateway to careers in game design and development, coding, IT,  
27 engineering, and web development.

28 **Recommendations**

29 On September 13, 2022, the Texas Workforce Commission's (TWC's) three-member  
30 Commission approved \$500,000 in Temporary Assistance for Needy Families (TANF) funding  
31 for a one-year esports pilot program. In response to the solicitation, TWC received twelve  
32 applications and funded three grant awards. Based on the interest TWC received, staff  
33 recommend including this initiative into the combined youth initiatives budget line item and  
34 consider the following options:

- 35 • Continue the current pilot program, setting aside \$500,000 in TANF statewide funding  
36 for a second project (contingent on the performance of the pilot program).
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- 1       • Devote up to \$300,000 for research and analysis of esports and the potential future  
2       impact on employers and the economy.

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4       **Decision Point**

5       Staff seeks direction on using \$500,000 in TANF statewide funding to make esports programs  
6       more available to Texas youth and up to \$300,000 for research and analysis of the impact of  
7       esports on employment and career opportunities in collaboration with the Office of the  
8       Governor’s Economic Development & Tourism Division (Film, Music, Gaming).