Esports Impact on School Culture and Climate in K-12 Schools: A Literature Review

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Keywords: Esports, K-12 Esports, Scholastics Esports, Esports in Education, Esports Student Well-Being, Esports Psychological Development, Esports School Culture, Esports Community, Esports Strategies, Esports Benefits, Esports Challenges.

Abstract: This literature review explores the impact of esports on school culture and climate, focusing on how it influences student well-being, self-regulation, and psychological development of K-12 students. The literature review examines existing research to understand the implications of esports participation within educational contexts, specifically in elementary and high school grade levels. The review will address key dimensions such as safety, relationships, teaching and learning, institutional environment, and the school improvement process. Additionally, the literature review provides some background on the potential benefits and challenges associated with esports in K-12 schools, shedding light on its effects on students' health, mindset, and overall school experience. These major groupings were derived from the general inquiry questions on esports school culture and climate from specific research that is currently available.

1 INTRODUCTION

Each one of these categories drew around ten to twelve relevant articles. The same articles were populated with many of the search results. The primary data sources were databases connected with Boise State University Library and Google Scholar. ChatGPT Artificial Intelligence (A.I.) was utilized to search for articles and each article referenced was traced and collected in Zotero to provide a database of pertinent research and develop quick summaries.

2 SCHOLASTIC ESPORTS IN K-12 SCHOOLS

Esports, short for electronic sports, refers to organized competitive gaming where individuals or teams compete against each other in video game tournaments. This phenomenon has rapidly gained popularity worldwide, evolving from a hobby into a mainstream entertainment industry with significant cultural and economic impacts (Taylor, 2018). Hamari and Sjöblom (2017) defined esports as a form of sport where electronic systems facilitate the primary aspects of the sport; the input of players and teams, and the output of the esports system, are mediated by human-computer interfaces. Esports is more than just playing video games as it is at times described. Players belong in leagues, and leaderboards, and play in tournaments. Esports is a growing trend with a huge following and spectators, largely due to online gaming and broadcasting technologies accessible to anyone.

As esports grows in popularity, the International Olympic Committee (IOC) announced that it has partnered with the National Olympic Committee (NOC) of Saudi Arabia to host the inaugural Olympic Esports Games 2025 in the Kingdom of Saudi Arabia (International Olympics Committee, 2024). Esports are increasingly being recognized as a legitimate form of school-based competition akin to traditional sports with the structured nature of scholastic esports programs parallels that of established athletic programs in schools (Jenny et al., 2017). While esports is growing in popularity across the globe in California, esports is now considered a California Interscholastic Federation sport (CIF), meaning that esports teams can now represent their schools by

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playing video games just like any other sport (CIF Esports Initiative, 2024).

Esports encompasses a variety of game genres, including first-person shooters, real-time strategy, and multiplayer online battle arenas, attracting diverse audiences (Wagner, 2006). The competitive nature of esports, combined with its digital accessibility, has enabled it to establish a 5 global community of players and fans who participate in and spectate online and in-person competitions (Hamari & Sjöblom, 2017). As esports continues to grow, its potential as a tool for education and skill development has become a subject of academic interest, particularly within the context of K-12 educational settings (Funk et al., 2018).

2.1 Esports in K-12 Education

In educational contexts, esports is increasingly being integrated into school curricula and extracurricular programs, both as an elective and after-school program, to engage students and develop skills. These programs provide a platform for students who may not be interested in traditional sports to participate in competitive activities, thereby promoting inclusivity and diversity within school environments (Jenny et al., 2017). Furthermore, the structured nature of scholastic esports can enhance student engagement and motivation, as gaming aligns with the interests and experiences of many students today (Squire, 2005). Wagner (2006) discusses, "For esports to reach their full potential in educational contexts, it is essential to develop structured programs that not only engage students but also enhance their learning through well-designed curriculum integration and pedagogical strategies" (p. 5).

Esports in K-12 education is increasingly recognized as a valuable tool for engaging students and enhancing their educational experience. As schools look for innovative ways to integrate technology and cater to diverse student interests, esports programs can offer a unique opportunity to harness the motivational power of gaming to support learning. These programs not only attract students who might not participate in traditional sports but also foster important skills such as teamwork, strategic thinking, and digital literacy (Funk et al., 2018). By aligning with students' interests in digital media, esports can increase engagement and participation in 6 school activities, thereby promoting a more inclusive school culture (Jenny et al., 2017). Seo (2013) argues that the “experience of competitive computer gaming goes far beyond digital play, traversing the online and offline presence, and involving collaborative efforts of multiple actors within the value network of eSports experience." (p. 1549). Building on skill sets such as communication and collaboration are key skills esports can help unlock for students.

2.2 Scholastics Esports

Scholastic esports in K-12 education represents a growing area of interest for educators seeking innovative methods to enhance student engagement and learning outcomes. By incorporating esports into the school environment, educators can tap into students’ existing interests in gaming. Esports programs offer a platform for developing critical skills such as teamwork, strategic thinking, and digital literacy, which are increasingly important in the 21st-century educational landscape (Funk et al., 2018). These programs not only provide an avenue for students who may not participate in traditional sports but also help bridge the digital divide by integrating technology into everyday learning experiences (Jenny et al., 2017). Lee & Hammer (2011) argue that elements of esports can be used to increase motivation and participation among students taking the competitive and social aspects of esports effectively capture students' attention and encourage sustained engagement.

Esports clubs can provide students with space where they can practice the 21st-century skills of collaboration, critical thinking, creativity, and communication skills. Hamari and Sjöblom (2017) argued that the video games being played in esports are usually complex and require a considerable amount of concentration to comprehensively follow the game. Scholastic esports provides an opportunity to engage students who may not participate in traditional sports. 7 Esports in education offer a unique platform for fostering inclusivity and engagement among diverse student groups (Funk et al., 20218).

2.3 Career and Technical Skills Opportunities

Being able to communicate effectively is a skill needed for the workforce and esports can help build that skill. Nielsen and Hanghøj (2019) case study found that “esports practice in an after-school program suggests that playing Counter-Strike: Global Offensive well is less about technical skill and knowledge about the game and more about being able to communicate effectively (p. 541).” Soft skills that are needed in a 21st-century workforce can be learned and reinforced in esports clubs in secondary schools. The emphasis on skill-building is a driving force in

starting esports clubs at secondary schools. Esports build students' critical thinking/problem-solving skills, being able to make connections across complex ideas, and collaboration (Career Success Built on Esports Skills, 2018). Research also suggests that esports players enrolled in an after-school esports class can experience significant learning that can transfer from digital gameplay to other social and educational contexts with benefits for communicative competencies (Nielsen and Hanghøj, 2019)

The integration of esports in K-12 education provides a unique opportunity to enhance career and technical skills among students, aligning educational experiences with the demands of the modern workforce. As esports involve a range of activities beyond gameplay, such as event management, broadcasting, and content creation, students can develop a variety of technical and soft skills relevant to numerous career paths (Funk et al., 2018). These programs encourage students to engage with technology in meaningful ways, fostering skills in areas like video production, graphic design, and digital storytelling, which are essential in today's digital economy (Jenny et al., 2017). 8 Furthermore, esports in education can catalyze increased interest in STEM (Science, Technology, Engineering, and Mathematics) disciplines. As many esports-related careers require a strong foundation in these areas, integrating esports into the curriculum can motivate students to pursue studies in computer science, engineering, and mathematics (Newhouse, 2017). This engagement is particularly beneficial for students who might not otherwise be drawn to traditional STEM subjects, as esports provides a context that makes learning these skills relevant and exciting (Rothwell & Shaffer, 2019). By offering real-world applications and career-oriented experiences, esports programs in schools can play a significant role in preparing students for future employment in a rapidly evolving job market.

2.3.1 Student Well-Being and Psychological Development

The integration of esports into K-12 education has the potential to significantly impact student well-being and psychological development by providing a platform that aligns with students' interests and fosters a sense of belonging and achievement. Moreover, Jenny et al. (2017) found that esports can promote the development of important psychological skills such as self-regulation, resilience, and stress management, as students learn to navigate the competitive pressures and teamwork dynamics inherent in gaming environments. As educators continue to explore the benefits of esports, it is essential to design programs that maximize their positive effects on student well-being while addressing potential challenges such as screen time and competitive stress (Funk et al., 2018). Trotter et al. (2022) longitudinal study showed the impact of student involvement in high school esports and showed that esports participation did not have a negative impact on any health or psychological factors. In addition, school esports programs have the potential to bring about positive psychological development and/or health behavior change, if implemented appropriately (Polman et al., 2018).

2.3.2 Self-Regulation and Discipline

Regular practice and competitive play help students cultivate a growth mindset, as they must adapt strategies and persist through challenges to achieve success (Anderson & Scholz, 2023). This process of setting objectives, tracking progress, and reflecting on outcomes is central to building resilience and self-discipline in students (Smith & Abrams, 2022). Furthermore, his study explores the impact of strategic video games, including esports, on students' problem-solving skills and emotional regulation. Competitive gaming environments teach players to manage emotions, deal with setbacks, and maintain focus, contributing to improved academic outcomes. (Adachi & Willoughby, 2013).

Beyond individual gameplay, esports in education also emphasizes the importance of teamwork and collaboration, which are crucial for developing discipline and social skills. Being part of an esports team requires students to communicate effectively and work together towards shared goals. Hong (2023) emphasized the importance of "balancing eSports participation with education," which highlights the importance of keeping a balanced lifestyle (p. 1444). By integrating esports into educational settings, schools can help students develop the self-discipline and regulation skills necessary for both academic success and personal growth.

2.3.3 Mental Health Impacts

The integration of esports in K-12 education has sparked discussions about its potential mental health impacts, offering both opportunities and challenges for student well-being. On the positive side, esports can provide a sense of community and belonging for students who may feel marginalized in traditional school settings. By participating in esports, students can build social connections and develop

interpersonal skills in a supportive environment, which can alleviate feelings of loneliness and isolation (Steinkuehler & Duncan, 2008). Furthermore, the structured 10 nature of scholastic esports programs can promote self-esteem and confidence as students achieve success and recognition in a domain they are passionate about (Griffiths, 2017). These benefits can contribute to improved mental health outcomes by fostering a positive self-image and reducing stress levels through engaging and enjoyable activities (Jones et al., 2014).

However, there are also potential challenges associated with the mental health impacts of esports in K-12 education that educators need to consider. Excessive gaming can lead to issues such as increased anxiety and decreased academic performance if not properly managed (Anderson & Dill, 2000). Additionally, the competitive nature of esports might contribute to stress and burnout among students, particularly if there is an overemphasis on winning (Colwell & Kato, 2003). Schools must implement balanced esports programs that emphasize healthy gaming habits, including adequate breaks and time management strategies, to mitigate these risks (Pontes & Griffiths, 2014). By fostering an environment that prioritizes mental wellness alongside competitive success, educators can help ensure that the integration of esports into K-12 education supports the holistic development of students (Kowert & Oldmeadow, 2015).

2.3.4 Overall Psychological Well-Being

The integration of esports in K-12 education offers promising avenues for enhancing students' overall psychological well-being by fostering environments where engagement and personal growth are prioritized. Esports can serve as a powerful tool for enhancing students' sense of accomplishment and self-esteem. When students participate in structured esports programs, they often find opportunities to excel in areas they are passionate about, which can lead to increased self-confidence and a positive self-image (Jones et al., 2014). Moreover, esports provides a platform for students to develop resilience and perseverance as they navigate the challenges of competitive play, which are transferable skills that contribute to overall 11 psychological well-being (Ryan et al, 2006). By cultivating a sense of competence and achievement, esports can help students build a foundation for lifelong mental health.

Beyond individual benefits, esports can also foster a sense of community and belonging, essential components of psychological well-being. Participating in esports allows students to connect with peers who share similar interests, creating a supportive network that can mitigate feelings of isolation and loneliness (Kaye & Bryce, 2012). This sense of community is crucial in school settings, as it enhances students' social skills and encourages positive peer interactions (Kowalski & Limber, 2007). Additionally, the collaborative nature of team-based esports games promotes the development of communication and teamwork skills, further contributing to students' social-emotional development (Steinkuehler & Duncan, 2008). By integrating esports into the educational framework, schools can create inclusive environments that support students' psychological well-being, helping them thrive both academically and personally

2.3.5 School Culture and Relationships Coach Development and Support

The incorporation of esports into K-12 education not only influences student engagement and learning outcomes but also significantly impacts school culture and relationships, particularly through the development and support of esports coaches. As schools integrate esports programs, coaches play a crucial role in shaping the educational and social experiences of students, fostering environments that emphasize teamwork, respect, and community (Jenny et al., 2017). Effective coach development is essential for maximizing the educational benefits of esports, as coaches are instrumental in guiding students to balance competitive play with academic responsibilities and social development (Funk et al., 2018). By investing in coach training and support, schools can ensure that esports programs contribute positively to both student development and the broader educational community.

Many up-and-coming esports athletes develop their skills independently without coaching, strategic planning, or target-oriented approaches. This may work for some, but many esports players would benefit from coaching and more explicit objectives in the development stage (Salo, 2017). Coaching and mentoring at secondary schools are needed to have viable esports teams to help the teams organize, compete, and advocate the program. The proper creation of training models that coaches can implement or adapt to their daily practices supports talent development. However, before that, understanding how esports skill acquisition and development work is necessary. Also, educating coaches on how to coach is crucial. Thus, establishing esports coaching courses could be a good first step.

Supporting and developing places where coaches could develop themselves, such as in academy teams, could facilitate developmental processes at the professional level where the performance pressure is higher. Providing more research opportunities and applied sports psychology would help sustain the healthy evolution of esports (Cottrell et al., 2018). Thus, the requirement of certification for coaches and managers should be implemented in the future. Coaching middle school and high school students can provide structure, guidance, and support to create a cohesive environment in which students can thrive with their esports teams (Pedraza et al., 2020). Partnering with local universities that have esports programs can help create such certification programs

2.3.6 Community and Sportsmanship

Creating a sense of community in an esports program is critical to have students want to be part of the program, but also excel in it. This structure provides players with a sense of being part of a community and facilitates mastering expertise in fine motor coordination and perceptual-cognitive skills, particularly but not exclusively, at higher levels of performance (Pedraza et al., 2020). Esports players must feel comfortable and accepted in the esports program 13 to feel invested in the community. Setting high expectations, setting ground rules, and communicating are essential components of the community each esports team will have to make.

In the community, students not only learn about the game but can open the opportunity for STEM Entrepreneurship. Which connects high-tech sector jobs not only in the games industry but also in data science, software and web development, social media marketing, and event organizing. This body of knowledge and skills crucially connects to the values of high school academic (college preparatory) and workforce development Career Technical Education (CTE) standards (Anderson et al., 2018). Students who see esports to grow their skills and improve the esports program will be more invested in it.

2.3.7 Inclusive environment

Students across America are constantly engaged with video games at home. According to the Pew Research Center overall, 84% of teens say they have or have access to a game console at home, and 90% say they play video games of any kind (whether on a computer, game console, or cellphone) (Teens, Social Media & Technology, 2018). This implies that students are knowledgeable about gaming and eager to interact with video games. Our secondary schools have the unique opportunity to harness students' interest in video games and create clubs that are inclusive to those who are interested. Gaming has the potential to cross social groups and genders. The Pew Research Center found that while a substantial majority of girls report having access to a game console at home (75%) or playing video games in general (83%), those shares are even higher among boys. Roughly nine in ten boys (92%) have access to a game console at home, and 97% say they play video games in some form or fashion (Teens, Social Media & Technology, 2018). The unique opportunity to have team rosters of both male and female students tear down gender stereotypes and build inclusivity. 14

Esports teamwork happens in a highly competitive, stressful, and intense virtual environment that requires fast decision-making and response rates associated with physical activities, making them action oriented. Esports offers a valuable and unique opportunity to further explore the social and organizational processes of team formation and team coordination (Freeman & Wohn, 2019). This would open opportunities for students who do not traditionally participate in after-school activities to join an organized and competitive sport. Additionally, students will have the opportunity to build on their 21st-century skills (communication, critical thinking, collaboration, and creativity) in their esports teams. Esports teams will also have the opportunity to interact with their peers, learn from one another, and collaborate in a competitive environment to challenge their gaming skills and build camaraderie with one another.

2.3.8 Social and Emotional Learning (SEL)

Esports clubs in secondary schools can serve as spaces for social and emotional learning. Martoncik's (2015) study suggests that esports is not only about the computer games and playing itself, but it can also serve as a means of satisfying various needs, e.g. the need to belong by forming friendly relationships through the membership of in-game teams and participation in LAN parties, or by satisfying the need for power through upholding the position of a game team leader and determining its course of action. Students use esports in a social aspect: to create a community of support and collaboration to be the best and work together as a team. This goes beyond just providing a space for students to play video games, whereas students are learning from one another and the teacher can serve as a coach to guide students through the competitive atmosphere. Esports are predominantly motivated by the desire for social

contact, for which the party creates suitable conditions (the opportunity to meet other players, cooperation between them, and mutual communication) and less by the desire for competing and winning (Martoncik, 15 2015). This goes against the negative belief that esports programs are just where students play video games.

In addition to private chat or messaging applications such as Skype or Discord, social media was a means of 'public' communication that went beyond single instances of interaction. Teammates 'friended' each other on Facebook and were able to build personal relationships beyond dyadic or team interaction, since they could access a more comprehensive image of their teammates' social lives (Freeman & Wohn, 2018). Communicating and building relationships beyond the esports club can help students connect and allow learning networking skills.

2.3.9 Influence on School Culture

The integration of esports in K-12 education significantly influences school culture by fostering inclusivity and enhancing student engagement. As esports programs gain traction, they attract a diverse group of students who may not typically participate in traditional sports or extracurricular activities, creating new opportunities for engagement and belonging (Funk et al., 2018). Moreover, esports can serve as a bridge between digital and physical interactions, integrating aspects of digital literacy and teamwork into school culture, which are essential skills in the 21st century (Jenny et al., 2017). By promoting a culture of collaboration and strategic thinking, esports programs can enhance the overall educational experience and contribute to a positive school climate.

Additionally, the presence of esports in schools can reshape traditional perceptions of competition and achievement. Unlike conventional sports, esports does not prioritize traditional physical abilities allowing students to demonstrate their skills in strategic thinking, problem-solving, and technology use (Smith & Abrams, 2022). By embracing esports, schools not only adapt to the evolving interests and needs of students but also cultivate a culture that 16 values innovation, adaptability, and continuous learning, ultimately preparing students for future challenges both within and outside education.

2.3.10 Student-Student Relationships

The case for scholastic esports to be broadly adopted in K-12 schools exists in the merits of creating inclusive environments creating safe and intentional social and emotional learning space and opportunity to learn career and technical skills needed in several industries. Building coaches at the secondary level and creating a community atmosphere are paramount for the success of the esports program. Secondary schools should capitalize on this growing trend to engage both male and female students who are already playing video games during their own time.

Unlike traditional classroom settings, esports provides an environment where students can engage collaboratively in team-based activities, enhancing their communication and teamwork skills (Jenny et al., 2017). These interactions help build social connections among students, breaking down barriers between different social groups and promoting inclusivity (Funk et al., 2018). This community aspect of esports is particularly beneficial for students who may feel marginalized or disconnected in traditional school settings, offering them a platform to express themselves and find belonging

2.3.11 Educator-Student Dynamics

Esports allows educators to connect with students through a shared interest in gaming, creating a more relatable and engaging learning environment (Anderson, 2020). By stepping into roles as coaches and mentors, educators can support students in developing critical life skills such as teamwork, strategic thinking, and digital literacy, which are integral to both academic and personal success. This collaborative approach encourages educators to facilitate student-led 17 learning experiences, promoting a culture of mutual respect and open communication (Smith & Abrams, 2022). Through esports, educators can foster a supportive environment that emphasizes the importance of both individual performance and collective achievement, enhancing students' educational experiences (Geneva 2023).

Additionally, esports in education provides a platform for educators to promote inclusivity and social-emotional learning. By leveraging the engaging aspects of esports, educators can create learning experiences that are not only educational but also personally meaningful for students, encouraging them to take an active role in their learning and development (Geneva 2023). Ultimately, the integration of esports in K-12 education enriches educator-to-student relationships by promoting innovative teaching practices that align with the interests and needs of today's students.

2.3.12 Benefits and Challenges

The integration of esports into K-12 education presents a unique combination of benefits and challenges, offering innovative opportunities for student engagement while also requiring careful consideration of implementation strategies. On the one hand, esports can significantly enhance student motivation and participation by tapping into their interests in digital gaming, promoting the development of valuable skills such as teamwork, strategic thinking, and digital literacy (Funk et al., 2018). These programs provide an inclusive platform for students who may not be involved in traditional sports, fostering a sense of belonging and community (Jenny et al., 2017. Schools must balance these factors by implementing policies that prioritize student well-being and create supportive environments for all participants (Anderson & Dill, 2020). As esports continues to gain popularity, understanding these benefits and challenges is crucial for educators aiming to use this dynamic tool to enhance educational outcomes.

2.3.13 Advantages of Esports Integration

Algorithms and Listings captions should be properly A qualitative study of the forms of participation characterizing collegiate and professional esports (Steinkuehler, 2018) found that, by 2017, the esports ecosystem was comprised of a broad collection of coordination and production roles that went well beyond competitive gameplay to include strategists, content creators, entrepreneurs, and organizers. One significant benefit is the ability of esports programs to engage students who may not traditionally participate in school activities. These programs appeal to students who have interests in digital technology and gaming, providing them with a platform to express these passions in a constructive and educational setting (Funk et al., 2018). Moreover, the collaborative nature of esports encourages students to communicate effectively and build strong relationships with peers, enhancing their social skills and contributing to a positive school culture (Jenny et al., 2017).

Beyond engagement and skill development, esports integration in K-12 education can also positively impact students' academic performance and motivation. The competitive aspect of esports can motivate students to improve their academic performance to maintain eligibility for participation, like traditional sports (Martončik, 2015). Additionally, esports can serve as a gateway to STEM (Science, Technology, Engineering, and Mathematics) disciplines, as many esports-related skills and careers require a strong foundation in these areas (Li & Lutz, 2018). This connection can inspire students to pursue further studies and careers in STEM fields, addressing the growing demand for skilled professionals in the digital economy (Newhouse, 2017). By integrating esports into the curriculum, schools can leverage students' interests to drive educational outcomes, making learning more relevant and engaging for today's digital natives.

2.3.14 Drawbacks and Concerns

The implementation of esports in K-12 education also presents unique challenges that educators must address to maximize its benefits. One such challenge is ensuring that esports programs are inclusive and accessible to all students, regardless of socioeconomic background or gaming experience. Additionally, schools must balance screen time with other educational activities and ensure that gaming remains a positive and constructive experience for students (Anderson & Dill, 2000). Effective integration of esports into educational contexts requires careful planning and the development of policies that promote healthy gaming habits while leveraging the educational potential of esports (Rothwell, Shaffer, & Stevens, 2017).

However, the integration of scholastic esports into K-12 education is not without its challenges. Schools must navigate issues such as ensuring equitable access to gaming resources and managing screen time effectively (Trotter et al., 2022) Additionally, educators must be mindful of the potential for negative behaviors, such as aggression or cyberbullying, which can arise in competitive gaming environments (Anderson & Dill, 2000). To address these challenges, schools need to implement clear policies and provide guidance to students on healthy gaming practices (Rothwell & Shaffer, 2019). By thoughtfully integrating esports into the educational framework, schools can harness its potential to enrich the learning experience and prepare students for future success.

3 CONCLUSION

As esports continue to gain prominence in K-12 education, understanding their impact on school culture and climate is crucial. This prospectus outlines the future implications, research questions, and theoretical framework for a dissertation aimed at exploring these impacts. With a focus on inclusivity, engagement, and skill development, the research will

provide valuable insights into the role of esports in shaping the future of education. Table 1 summarizes some of 20 the advantages/benefits along with drawbacks/concerns discussed in this literature review, much research and potential studies are needed to continue to truly paint a picture on what a truly effective scholastic esports program looks like. My dissertation aims to shed light to the missing and needed research on how esports impact school culture and climate in K-12 schools.

Table 1: Literature Review Themes Table.

Advantages/Benefits	Drawbacks/Concerns
Enhanced Student Engagement Esports attract students who may not participate in traditional activities, increasing overall engagement (Jenny et al., 2017).	Screen Time Management Excessive screen time may lead to negative health impacts if not properly managed (Anderson & Dill, 2000).
Skill Development Students develop skills in teamwork, strategic thinking, and digital literacy (Funk et al., 2018). Esports require effective communication and teamwork, enhancing students' social skills and ability to collaborate (Thompson & Taylor, 2020).	Potential for Addiction There is a risk of gaming addiction, which can affect students' academic performance and social life (Li & Lutz, 2018). |
Inclusivity and Community Building Esports foster inclusivity by providing opportunities for diverse student groups to participate and connect (Jenny et al., 2017). By providing new outlets for student involvement, esports can boost overall school spirit and engage-ment (Funk et al., 2018).	Resource Allocation Need for advanced technology and specialized training for educators to support the sustainable growth of esports programs in schools (Taylor, 2012).
Pathway to STEM Careers Esports can inspire interest in STEM fields, preparing students for future careers (Newhouse, 2017).	Cyberbullying and Negative Behavior Competitive environments may foster cyberbullying or negative behavior if not supervised (Johnson, 2020).
Motivation for Academic Improvement Participation can motivate students to maintain academic eligibility, like traditional sports (Martončik, 2015).	Overemphasis on Competition The focus on competition may lead to stress and burnout among students (Colwell & Kato, 2003).

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