



Engaging Students through Esports in K-12 Education

Understanding the value and potential impact

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Executive Summary

Esports are digital games played on electronic devices, such as computers, consoles, and tablets, where players compete against each other in structured formal tournaments, leagues and/or conferences. Gaming experiences can be in the form of teams and individuals through direct interaction. Some examples include MOBAs (multi online battle arenas) like League of Legends and Dota 2, FPS (first person shooters) like Valorant and Overwatch, fighting games like Brawlhalla and Super Smash Bros., sports like Rocket League and Maden Football, and miscellaneous categories like Microsoft Excel, Tetris, and Chess. Competitions can also be based on design challenges and speedrunning in Minecraft and other titles.

Esports competitions share similarities with traditional sports for developing mental and physical skills to compete recreationally and at the highest competitive levels. Opportunities to play professionally are as difficult to achieve as with traditional sports. From casual to college, to professional, the player pool shrinks significantly. However, there are many opportunities for careers in professional esports organizations such as coaches, fitness trainers, casters, accountants, marketers, content creators, and administrative assistants. Collegiate courses and degrees in esports fields expands along with athletic scholarships, which gives high school students more opportunities to apply and study in this growing field.

As k-12 schools add esports programs, like clubs, intramurals, courses, and teams, there are greater opportunities for students. An esports program that includes most of these options can promote greater access and belonging for more students to participate in the school community. Growth in providing a welcoming community and equitable access for each student can be developed with a focus on involving diversity in ethnicity, economics, and gender identity. Global Professional Skills (GPS), such as communication, collaboration, empathy, and creativity and the ISTE standards for students, especially Digital Citizenship, can be developed and nurtured through exploration and reflection around digital interactions, which are transferable skills to academic classes and college and career opportunities.

Prior to esports as a formal activity in k-12 schools and colleges, the landscape lacked supportive governance and development of the above skills for young people. Now, the schools and colleges that are committed to esports provide students with the needed guidance and structures to prepare them for the global professional community. These experiences give their students a distinct advantage over schools and communities who do not. This document outlines key ideas that address the value of having an esports program from what is Esports to building a three-year esports implementation plan:

Topics Addressed

- What is Esports
- Esports for K-12 Students
- Esports and Academics
- Developing Global Professional Skills (GPS)
- Equity and Inclusivity
- Career Opportunities
- College Opportunities
- Getting Started: Develop a Three-Year Implementation Plan



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What is esports?

During the summer of 2019, a tournament was held for the best 100 players in the world. Over ten weeks, 40 million competed to make the final hundred. The finalists competed at Arthur Ashe stadium over three days for the top prize. The 100 finalists were guaranteed \$50,000. Top ten made between \$225,000 to the champion earning three million dollars. The contest was not the US Open Tennis Championships typically held at Arthur Ashe stadium. The competition was Fortnite, an online game that had over 250 million registered players. (Statista and Saifi)ⁱ The winner of the inaugural tournament and three million dollars was Kyle Giersdorf, aka Bugha, age 16 (Bryson and Good)ⁱⁱ. With the end of summer vacation, one might wonder if his high school was prepared for his return?

In 2021, esports market revenue exceeded one billion dollars (Gough)ⁱⁱⁱ, and is expected to surpass six billion dollars by 2030 (Fortune Business Insights)^{iv}. If sports are a competition with rules for games such as football, soccer, and tennis, then esports is the same with electronic games. According to the online dictionary, Lexico by Oxford, “A multiplayer video game played competitively for spectators, typically by professional gamers.”^v Esports are digital games played on electronic devices, such as computers, consoles, phones, and tablets, that players compete against each other in structured formal tournaments, leagues and/or conferences. Playing League of Legends, Brawlhalla, Rocket League, or Tetris with friends is casual esports gaming often seen with friends online or in school clubs and intramurals. Competing in these same titles through a league or tournament for salaries and/or prize money are professional sporting events.

Esports shares similarities to traditional sports like tennis, football, soccer, basketball, and track and field. Players train fulltime to improve physically and mentally. They develop their fundamentals or mechanics of performance skills, along with intensive study of item combinations to gain the best advantages. They compete under specific rules and are supervised by a referee system. Competitions are face-face for traditional sports. Esports events can be both in-person and virtual. There are spectators seated at the matches and others watching through video streams, cheering and groaning depending on how their team is doing. Casters call the play-by-play and color commentating. Sports analysts make predictions and do post-game breakdown of why one team lost and the other succeeded. Player and coach interviews before and after games share their insights to fans and local communities. Teams compete for tournament and league titles and championships, earning trophies and bragging rights in schools or salaries and prize money at the professional level. Endorsement deals are made with players and team organizations. Fans play these games at home with some dreaming of someday getting to compete, produce esports content, and/or run competitions in k-12 schools systems, colleges, and, some day, the pros.

Professional teams for games like Fortnite, Dota 2, League of Legends, Overwatch, Valorant, and Super Smash Bros provide opportunities for players to train and compete for up to six-figure earnings. The elite players earn more. (Esports Earnings)^{vi}



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	Player ID	Player Name	Total (Year)
1.	Yatoro	Ilya Mulyarchuk	\$1,394,040.40
2.	Miposhka	Yaroslav Naidenov	\$1,389,040.40
3.	Collapse	Magomed Khalilov	\$1,389,040.40
4.	Mira	Mirosław Kolpakov	\$1,389,040.40
5.	Larl	Denis Sigitov	\$1,389,040.40
6.	Kami	Michał Kamiński	\$713,047.00
7.	Zai	Ludwig Wåhlberg	\$639,008.80
8.	Boxi	Samuel Svahn	\$639,008.80
9.	Nisha	Michał Jankowski	\$636,508.80
10.	iNsania	Aydin Sarkohi	\$636,508.80
11.	miCKE	Michael Vu	\$636,508.80
12.	Ace	Marcus Hoelgaard	\$613,779.60
13.	Quinn	Quinn Callahan	\$613,779.60
14.	Seleri	Melchior Hillenkamp	\$613,779.60
15.	dyrachYO	Anton Shkredov	\$613,779.60
16.	tOfu	Erik Engel	\$613,779.60
17.	mero	Matthew Faitel	\$566,820.00
18.	Cooper	Cooper Smith	\$557,050.00
19.	Setty	Iwa Zając	\$428,861.22
20.	Mikoto	Raffi Fathur Rahman	\$426,906.20

For context, in the LCS, the North American league, the base salary is reported as \$75,000 with salaries reaching six figures. (Collins)^{vii}

Many fans play the games on consoles, phones, and computers. Some may imagine playing with their favorite team or player and try to make the same moves as their idols. Other players grind for many hours in ranked solo queue^{viii} playing their game for the dream of possibly joining the professional ranks.

However, the reality is that, like traditional sports, the chances of becoming a professional esports player is just as difficult to attain. (NCAA)^{ix} The best of the best of the best might get a shot. For example, in the North American League of Legends (LCS) there are ten teams with 5 starting positions. Only 50 players compete at the highest level. The potential player pool for competing for those 50 slots globally was approximately 180 million concurrent players as of 2022. (James and Spezzy)^x Other esports titles share this challenge for professional spots vs player pool. (Baumbartl)^{xi} With such huge odds to overcome and play professionally, there are many more job opportunities, both traditional and new, that those interested in a career in esports can prepare for, such as accounting, nutrition, marketing, content creation, HR, and many more.

Esports for K-12 Students

Extracurricular activities such as clubs, intramurals, and sports are an integral part of school culture and lives of families. Students of all ages participate. Esports is no different in its opportunities for developing positive life skills that support college and career readiness and digital citizenship skills as outlined in the ISTE Standards for Students^{xii} These concepts is further explored in [Developing Global Professional Skills \(GPS\)](#) (McCarthy)^{xiii} later in this paper.



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- **Elementary Schools**
Elementary students explore open sandbox games that foster creativity and collaboration, such as Minecraft, game levels development, simulations, and coding. Age-appropriate pvp (player vs player) games may also be included. ESRB ratings^{xiv} of games tend to be E for Everyone.
- **Middle Schools**
In the middle grades, pvp games that are representative of professional plays are added to the continued experiences with open sandbox games. ESRB ratings can range from E for Everyone, E10+, and T for Teens. The latter option is dependent on grade levels that include students who are 13 or older.
- **High Schools**
At the high school level, there is wider variety of age-appropriate game titles available, with emphasis on games played at the college and professional level. ESRB rating can include T for Teens, E10+, and E for Everyone.

ESRB rating is only one factor considered when adopting esports titles for students to play.

For all grade level groups, sports-based and player vs player (pvp) games along with tablet and phone games are emerging into their experiences. In some places, fighting games, like Super Smash Bros and Brawlhalla, with school approved ESRB ratings^{xv} are included in the student experience.

Another value of esports in K-12 education is that it offers a pathway for students to feel connected to the school culture. For example:

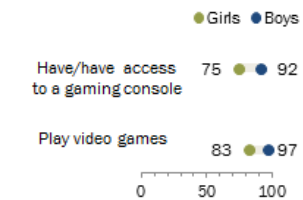
97% of boys and 83% of girls play video games according to a Pew Research Center study.^{xvi}

Before esports entered schools, there existed groups of students who had little to no interest in what the school culture offered, like traditional sports and clubs. The activities they were most passionate about, digital gaming, was not provided as an opportunity. Esports programs are ways to address engagement for many students to reconnect through formal school programs.

As esports experiences enter schools, more students are finding their way to be part of the community. As with other formal extracurricular programs, esports participants have greater incentive to manage their grades, attend classes, and participate in positive ways in school activities. (Schaffhauser)^{xvii} This is not to say that gamers do not take care of their academics. Rather, there does exist a population of students who may have struggled in some areas of school culture because they find little to reflects them or their interests, who now are drawn from being on the outside of the school community to developing an invested interest in becoming a member. Equally important is that their interests and talents are newly recognized because esports have become part of the school culture.

Most teen boys and girls play video games

% of U.S. teens who say they ...



Source: Survey conducted March 7-April 10, 2018.

"Teens, Social Media & Technology 2018"
PEW RESEARCH CENTER



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This is exemplified in the esports intramural program DePaul University started in the fall of 2020. The program had 1243 participants. In a survey about participation, they found that:

- 48%: Only involved in the esports program. Not involved in any other school program. This is compared to nationwide studies at 47%.
- 19%: Learning about the esports program was a deciding influence for choosing to attend DePaul University.
- 63%: Made 1-2 new friends or a regular group of friends because of the Esports program. “This sense of community and belonging can directly correlate to retention efforts at DePaul.”
- 78%: Prefer physical spaces to play games face to face because of the social connections made and meeting new people.

Based on a summer camp program at Plymouth-Canton Community Schools in 2021 and 2023, students from middle and high school responded to some of the same questions. The results were similar:

- 40%: Only involved in the esports program. Not involved in any other school program. DePaul was at 48% compared to 47% nationally.
- 95%*: Made 2-3 new connections who they enjoyed playing with because of the Esports program. DePaul was at 63%.

*No students in the survey reported only connecting with just 1 new person.

Esports is for the athletes who compete for the school or in intramural leagues. It is also for the students who love to play these games for fun but have either little interest in the competitive side or lack the talent to compete on a team or are unable to perform at a high level. As shared previously, few gamers will make it to the professional level, because of the sheer number of people competing for minimal slots. Many find interest in the esports world regarding work opportunities other than being a player on the team. Through esports, they explore and learn about various roles, such as content creators, esports casters, coaches, nutritionists, social media marketers, influencers, human resources, and many more careers that support an esports organization or business. Schools that provide such experiences that connect colleges and careers help prepare students with knowledge of work opportunities in esports fields have a deep understanding of the gaming culture and how their role can contribute to its success. Esports programs empower schools to offer experiences with content creation for marketing and entertainment, live production of matches with shout casters and streaming content, and designing marketing materials that represent the school while supporting the clubs and teams.

Esports and Academics

ISTE Standards for Students, global professional skills (GPS), and preparations for college and career opportunities are integrated into curriculum standards in knowledge, application, and higher order thinking. The opportunities for offering courses that support esports are wide and varied. Career Technical Education and STEM/STEAM are obvious options because of content creation through digital media, coding, systems software certifications, computer science careers,



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game design, video production, nutrition, business, and other fields. Students can also benefit from integration of esports into core curricular areas or as a standalone pathway for gaining academic skills in context of a topic they are passionate about. Some examples include:

- Writing informational and opinion articles about professional competitions.
- Analyzing data points to evaluate the best itemization strategies for champions.
- Produce a plan for exercise and nutrition to optimize intense game performance for 3-5 hours.
- Explore how heart rate and stress levels impact play performance and how to mitigate negative experiences.

Several organizations develop esports related resources that can be used in many traditional courses, such as NASEF^{xviii} with English courses and course maps that support esports pathways. Schools looking for flexibility might look at the Esports Learning Guide for Teachers and Coaches (ELGuide) by ALP and Dell.^{xix} This guide contains modules on different aspects of esports and gaming culture and supports learner development of the ISTE Standards for Students, global professional skills, computer science standards, and writing skills. The modules can be used as a standalone course or sifted to use chosen modules in existing courses. REMC's [Esports Amplified](#)^{xx} provides a list of resources available to support schools and districts at different levels of esports programming.

As the course examples will show, esports classes are not about playing games. They are experiential chances for students to learn curriculum content and global professional skills in context of esports and gaming. For example, the Esports Learning Guide for Teachers and Coaches supports the work of schools to have learners explore college and career opportunities while developing important skills in research, information literacy, and computer science standards.

Developing Global Professional Skills (GPS)

Esports is a global community. Related businesses intersect with cultures and economics across the world. The skills required to be successful go further than just the training acquired in the core academics. In the past, the term 21st Century Skills was used to describe what students needed to be able to use when navigating any workforce. However, this term has seemed dated and time dependent. In Australia, the term, General Capabilities, has been used. College and Career skills or employability skills are also more relevant terms. Global Professional Skills (GPS) (McCarthy)^{xxi} is the term used here because skills like collaboration, communication, problem-solving, and creativity, among other important professional skills are important across the globe and cultures.

The National Association for Colleges and Employers (NACE) does an annual survey of its members that asks what attributes are most sought from a job candidate and incoming college student. The top ten has been relatively consistent over the years. Here are the top five from November of 2022^{xxii}:

- | | |
|------------------------------------|---|
| • 61.4%: Problem-solving skills | • 50.4%: Analytical/quantitative skills |
| • 61.0%: Ability to work in a team | • 50.0%: Communication skills (written) |
| • 52.4%: Strong work ethic | • 50.0%: Technical skills |



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If these are skills that colleges and employers prize from incoming students and employees, how are they intentionally integrated in the development of students in grades K-12? Building a robust esports program has many of these skills embedded into what scholar gamers and esports athletes do when competing and supporting the games. Embedding a conscious development of these skills in an esports program can enable students to raise their quality of work and play in games, production, management, and leadership. Such skills can have a crossover impact on their other studies and activities inside and outside of school.

The ISTE Standards for Students^{xxiii} establishes internationally recognized categories for development by learners while they are in K-12 education. They include:

1. Empowered Learner
2. Digital Citizen
3. Knowledge Constructor
4. Innovative Designer
5. Computational Thinker
6. Creative Communicator
7. Global Collaborator

States like Michigan have adopted these standards and taken a view by age bands^{xxiv} of 4-7 year olds, 8-11 year olds, and 12-14 year olds. The language is adapted to be aligned to developmental support by age group. For esports if the global professional skills are the tools for being a successful student, gamer, employee, and entrepreneur, then the ISTE Standards for Students are the core categories for applying those skills in gaming, academics, and professional practices.^{xxv}

The Digital Citizen category is impactful to online professional behavior, informational fluency, and cyber security. Navigating the information-rich online world is challenging. Sites for esports and gaming like Reddit, Twitch, and other social media platforms are places where rumors and speculations can be presented as facts. This can harm the reputations of players, esports personalities, and content creators if false or misinterpreted information turns an audience against them. Digital citizen skills strengthen a student gamer's toolbox to sift out facts from speculation and to professionally communicate, even defend, from those who troll (attack with malice or bully) them.

The skills of research and information literacy are core parts of becoming an adept digital citizen. This informs our efforts to produce quality content that is accurate and helpful.

Use of digital content based on Intellectual Property is another important area of focus due to the exploding growth of content creation. Understanding copyright usage and citation, plus knowledge of creative commons licensing such as Open Educational Resources are invaluable for students and educators.

Digital Privacy is increasingly impacted by the skills and knowledge of individuals practicing good cyber security skills such as password management and protecting ones personal information. Esports programs are ways to engage students in wanting to develop these important skills for future life in colleges and/or careers.



Equity and Inclusivity

Before there were esports in k-12 schools, traditional sports and clubs were the biggest options for extracurricular participation. Students interested in esports could join clubs such as gaming, coding, maker space, or computer building depending on the resources in the school. But when it came to sporting events under the Friday night lights or a gymnasium packed with screaming fans as casters shouted descriptions of the actions on the field, gamers who lacked the skills in traditional sports were left on the sidelines. Yes, they could cheer in the stands, but they had no place on the field of play.

School esports programs have similar benefits as traditional sports. An important impact is its inclusiveness or engagement of all students. Surveys from the Pew Research Center^{xxvi} found that:

- 92% of boys and 75% of girls have access to game consoles.
- 97% of boys and 83% of girls play video games on some device.

Such participatory numbers show a shared interest in video games that could be leveraged towards inclusion by most students in a school. Based on interviews in schools across the United States^{xxvii}, educators consistently stated that groups of students were participating in esports, where before they had not been involved in school activities. Often, these students were referenced as having limited engagement with school activities prior to esports. Once active, coaches and teachers were able to leverage relationship building and, in needed cases, academic eligibility to encourage those students who lacked motivation in the classroom to make the needed change. Esports programs can have a significant impact on engagement and connection by students to their school, where in the past such relationships were limited at best. (Hueber)^{xxviii}

As with traditional sports, getting students to become committed to their academics at times can be a struggle, supports for academic eligibility are a toolset that can be readily used because the students want to be in the esports program. As esports grows in popularity the effect on how esports participants are viewed by their peers and teachers can have an upward positive impact for feeling part of the school community. (Steinkuehler)^{xxix}

Esports programs that offer teams, clubs, and course pathways gives access to many more students than schools who only offer teams. One important benefit of esports teams is that they can be coed, which is occurring in some schools across the country. A PEW study (Duggan)^{xxx} found that women were almost as likely to play digital games as men. Yet, the number of women players participating in esports is dramatically lower compared to men. Based on informal observations at esports events, teams and clubs that include female staff members were more likely to have girls participating.

This disparity in participation can be significantly impacted through k-12 where educators can intentionally build more gender participation into esports programs through education about improving gamer culture^{xxxi} and by providing opportunities and structures that eliminate the gap in esports and gaming programs. One such program is Girls Who Game. (Friedman)^{xxxii} This program gives young ladies rich experiences in the gaming world, both with collaborative and



social play, and with exposures to careers such as coding. Such programs demonstrate that there is a large and interested pool of students to draw into esports programs.

Competitions and career opportunities are available for everyone, and in K-12 education creating an atmosphere that is both welcoming to all students, including the rich diversity of cultures, and teaches how to “be” actively inclusive are important to combating toxic parts of online gaming. With positive and constructive supports in place, esports culture can be meaningful to student participation. (NASEF)^{xxxiii} Esports programs that include a focus on the ISTE Standards for Students can help prepare and empower gamer scholars to change gaming culture into a more generally positive community.

Learners having a voice in their education experience is important towards raising student buy-in through engagement. (School Voice Report)^{xxxiv} Esports programs that include clubs and courses are ideal structures for fostering and nurturing student voice through self-explorations of career opportunities and immersing in applying such skills as content creation, reporting on games, and other production decisions. Giving students opportunities to use their voice can support self-advocacy.

There are equity decisions to be made with providing access to the games for all students served in the school community. Needs include students from limited economic backgrounds that are in need of resources and those with physical challenges that could be addressed through assistive technology. Organizations and companies exist who provide a service to schools of managing and running esports leagues and tournaments for different esports games. Each group has strengths and challenges in relations to equity. When exploring any organization who may manage scheduling and operations of a gaming event, here are some considerations:

Access to in-game assets

Some of the competitive games include a library of champions that players choose from to play when inside the game. Many of the current popular games have over 100 champions for players to choose from. In many cases, access to most champions requires purchases. Players must either grind hours of play to level up their account for in-game currency or they must spend money to expand their champion pool. Some games unlock all champions for the starting player; however the game must be purchased. Access means that students new to the game can work alongside veterans to learn the game using the champions that interests them the most. Such a setup promotes engagement and perseverance by students new to the game to put in the time to improve skills.

This situation might create barriers for students and their schools who want to engage players and teams into leagues or tournaments. They must purchase the champions and spend hours leveling up the account to compete, which greatly reduces time learning the skills and strategies for the upcoming competition. The money cost to purchase the champions could be prohibitive for some. Or players just grind hours to get any champions to hit the required number, which forces players to play champions they may not be interested in.

In esports where champions can be banned from a match, teams with a more limited pool of champions can be forced to play one that they have little interest in or experience with by teams with a richer champion pool. Having many or all champions unlocked and available to all teams levels the playing field for competitive play.



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Access based on fees or costs

Different organizations charge different fees for their services to manage leagues and scheduling. It is important to look into what services are offered such as the valuable feature of unlocking of in-game assets (see the previous section), reliability of service for connecting teams for competitions, and the scheduling system. Another consideration is if the publisher's games are included in the fee. For example, games like Super Smash Brothers and NBA2K requires purchase of the game for casual play. If not, this is a cost that must be factored in when offering to students. Another consideration is to look towards the state governing body for guidance about esports. Alignment with that organization is important for providing esports athletes with a seamless experience to what they can expect when competing in a tournament or championship.

When choosing an organization that charges a per student or school fee, review internal resources and possible community sponsorships. If students are expected to pay the fee, this could create economic inequity for access. Depending on the community, some or many students could be excluded from the rich experiences of esports because of entry fees.

Career Opportunities

Revenue from the esports industry exceeded one billion dollars in 2021 and is projected to exceed \$6 billion by 2030. ([Fortune Business Insights](#))^{xxxv} Esports audience size worldwide nearly reached half a billion in 2021, of which 240 million viewers were casual and 234 million were enthusiasts. (Gough)^{xxxvi} Another way to look at the business impact of esports is the example of the League of Legends 2019 world tournament. The finals between FunPlus Phoenix of China and G2 Esports from Europe was a three hour best of 5 game matchup. Before a packed stadium and global viewers watching the live online streams, FunPlus Phoenix won the championship 3 games to zero. The total viewership was for match was 44 million. This number would increase to 73 million in 2021. Over 100 million viewers watched the 2019 tournament, which exceeded the NFL Super Bowl.^{xxxvii}

In another example, Twitch.tv, an online streaming platform, is used by 7.57 million active streamers as of December 2021. Streamer earnings in the same year reached 96.8 million dollars. (Clement)^{xxxviii} Everyone can start a Twitch channel and stream their content for anyone to watch their live game play. Viewers can subscribe to a streamer's channel and send money to them through the platform.

Such viewership attracts advertisers, which brings in millions of dollars for esports organizations and businesses. With opportunities for greater profits, more jobs are created to raise efficiency and quality of competitions, productions, team preparations, and sales. Traditional and new careers are identified and incorporated, which means more work options for students graduating high schools and colleges.

The field of esports contains many opportunities for careers and professional experiences. Some are new while others are traditional pathways with a gamer's flair. Here is a starting list. There are more options than this list shows, but it gives a good perspective of the available opportunities.



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Content Productions:

- Creators
- Producers
- Editors
- Marketers

Gamers, influencers and personalities put content onto online streaming sites like YouTube, Twitch, and Facebook for public consumption. Media mixing and production are valuable skills. People with such expertise are sought after to take media and turn it into a polished products for esports organizations looking to grow their audience base. The opportunities vary widely from studio employees to independent consultants.

Esports Entertainment

- Casters
- Analysts
- Talk show personalities
- Journalists
- Stage crew

These are the people who perform the show by discussing the game, the players, and the stakes of the competition. Behind the scenes are those who make sure that the production is successful, such as lighting, sound, video, and other technical fields. The show's success is dependent on these groups working in concert for the live and streaming audience.

A related group are the esports journalists. These professionals report the news to fans hungry for more content. Their work is reflected in written articles, podcasts, and videos. Sometimes these three media are combined to reach a wider audience. Social media in esports is taken to a different level as they navigate direct interaction with the very audience that they are presenting news to.

Marketing

- Social media marketers
- Sponsors
- Influencers

Esports is made up of the game publishers, team organizations, and the event organizers. Games might become successful by the nature of their structure. Sustainability and remaining relevant over time are impacted by how stakeholders market themselves and the game. Building a good brand is important. Marketing skills combined with a gaming background are important for understanding the target audience who can be both passionate and opinionated about what is good and bad in how the game is run as an esports.

Business Office

- Human Resources



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- Accounting
- Management
- Board
- Investors

The games may be fun for casual players. Esports may be in high demand for consumption by a global audience. Yet, the backbone is the business side. Professionals in this area are important for ensuring that the company or organization stays profitable enough to remain in existence. These roles, while traditional, are stronger when those in them have experience and an authentic understanding of gamer culture. Understanding the culture being supported is critical to building a successful business that draws people who want to work for them and for fans who stay interested in their brand and product.

Team Infrastructure

- Coaches and Players
- Support staff, including chefs, personal trainers, nutritionists, sports psychologists, scouts, game analysts, role coaches, assistants, and more.

Players in successful organizations get much support. The health and wellness of players goes beyond the mechanics and skills that they honed over many years of playing the game. Personal fitness and mental health are critical for players to sustain their drive through what can be a grueling season that requires many hours of work each day to be competitive. When players and teams compete for long hours in a day, the difference for success could be their fitness training, much like the benefits in traditional sports teams. Logistics of travel and equipment needs are other integral jobs that need capable professionals to tackle so that players and coaches can focus on game preparations.

The opportunities for esports athletes and student gamers are far reaching both in the traditional career tracks and areas that continue to evolve and grow. Esports programs that include clubs and courses alongside teams can offer immersive and broad experiences into tech and non-tech focused fields so that all learners can learn about potential pathways.

College Opportunities

Esports teams in colleges is the obvious lure for esports athletes. The chance to play at the collegiate level has strong appeal for many students, where before such an option did not exist. In 2018-2019, the National Association of Collegiate Esports reported that universities offered an estimated \$16 million dollars in scholarships and aid (NASEF)^{xxxix}. At approximately \$20 million dollars, this number continues to grow as more colleges are adding or expanding their esports program. Like traditional sports, playing for an esports team may be the best chance for some students to afford getting a college education. However, it should be noted that the number of player spots is limited, similar to the minimal spots on a traditional college sports team.

Becoming an esports athlete is not the only option for students. Colleges are adding programs about the esports industry. This includes degree tracks and endorsements added to existing degrees. For example, a candidate earning an accounting degree with an esports endorsement communicates to businesses of the person's qualifications to work in traditional organizations, while also signaling to esports companies their specialized experience and expertise.



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There are many existing degrees that are needed in the esports business world. Some examples include human resources, accounting, video production, stage management, nutrition, and marketing. Through programs and related internships, more students can find a pathway towards work in the esports fields that reflect their passions. This enables students to pursue a career that can either support esports or become deeply integrated into the culture and community. Such programs that are linked to academics or established departments have grants and scholarships that may not be specifically attached to esports, however a student could apply based on their career pathway.

Because of these opportunities for esports participants, school districts, and schools at all grade levels should explore and develop support systems for their students interested in these fields, just as they do for the core academic subjects, Career Technical Education (CTE), and STEM/STEAM. Esports curriculum and courses can be seamlessly integrated into the existing supports systems. Doing so helps students prepare and plan for college applications and acceptance. Such plans could include subject-embedded or integrated esports experiences inside course curriculum, job shadowing, internships, career portfolios, and other college and career planning strategies.

Getting Started: Develop a Three-Year Esports Implementation Plan

Building a program takes time, resources, structures, and vision. The temptation is to start fast by building an esports team and compete with other schools. This approach can lead to quick successes in the short term with students competing against other schools. However, this approach comes at a steep price: limited access and equitable opportunities. Few students get to participate, while many others are turned away due to available team slots, equipment, and lack of other opportunities. Simultaneously starting clubs can be an important start. Another challenge for staff can be getting substantive support from building and district leaders, where the obstacle may be a lack of understanding of the value of investing funds for students to participate in esports, especially if funding is tight. From the perspective of these important stakeholders, they need to know how their support will lead to meeting expectations for when students graduate.

A multiyear esports implementation plan leads to success through sustainable structures and practices includes at least three core components.

Multiple Access Points Promotes Opportunities for All Students

An implementation plan serves the needs for all stakeholders, beginning with students and including staff, leadership, and the community. What makes esports into a program is not just having a team that competes. It should include the formation of clubs, intramurals, and pathways through new and existing courses. These components expand access and opportunities for all learners.

Incorporate Inclusivity, Equity, and Digital Citizenship

The purpose and planning should include a commitment towards inclusivity (actively engaging all students as reflected by the genders and cultures in the school), equitable access, Global Professional skills, and Digital Citizenship skills. For a portion of the student body, esports is their first feeling of being connected to school, where what they value is part of the formal program. Ensuring that all students have access to participate in some part of esports is essential.



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Decisions about equipment and game titles should be based on removing barriers that might prevent some students from participating, such as physical barriers, participation fees, and games that are free to play versus cost to play.

Digital citizenship is an important reason for having an esports program. With most games being played online against people across the world, good communication, collaboration, and other global professional skills are essential. Effective development of these skills can lead to transferable practice in the academic classrooms.

Plan for Funding, Equipment, and Staffing

The plan should address resources, such as funding, equipment, and staffing. Funding can come from multiple sources, including budget line items for staffing, external grants, and community sponsorships. Equipment may include existing resources along with a long-range plan for adding additional computers and/or consoles over time. Staffing is important for the implementation and expansion of esports opportunities for students. Staffing may also include student volunteers who provide the logistical support that keeps the program functioning while providing leadership and digital citizenship experiences. Student staff can be the backbone of any esports program while also giving them authentic work experience that goes on their work resumes.

Develop a Communication Plan for Stakeholder Support

Building buy-in by all stakeholders is critical to the success of any program. Esports can mean different things for different people. Formal structures in schools are different from the informal activities experienced at home and virtually. Stakeholder groups represent a variety of perspectives, such as students, parents, school and district staff, board, and community businesses and organizations. Create a messaging plan that address common points to be communicated to all stakeholders. Include information that is personalized to the interests and perceptions of each stakeholder group. Refer to the references listed at the end of this document to use as part of your communications.

Launch your esports program

Get started. Go slow to develop efficacy and smoothness of the program before picking up speed. Collect data and communicate progress frequently. Review the esports implementation plan ongoing to monitor progress and challenges as an important way to address problems before they get too big to handle. Celebrate the successes, big and small. If needed, begin work months before the official start of the plan. Use the time like game beta testers to organize committees, test ideas, and address initial logistical needs that will support a more successful launch.

Game on!



Cited References

ⁱ Statista. Number of registered users of Fortnite worldwide from August 2017 to March 2019.

<https://www.statista.com/statistics/746230/fortnite-players/>

Saifi, Yousef. How Many People Play Fortnite? Concurrent and Registered 2019 Player Count. Fortnite Insider.

(November 4, 2019) <https://fortniteinsider.com/how-many-people-play-fortnite-concurrent-and-registered-2019-player-count/>

ⁱⁱ Bryson, Derrick and Niraj Chokshi. This Fortnite World Cup Winner Is 16 and \$3 Million Richer. The New York Times. (July 29, 2019). <https://www.nytimes.com/2019/07/29/us/fortnite-world-cup-winner-bugha.html>

Good, Owen. Fortnite World Cup champion Bugha is \$3 million richer. Polygon. (July 28, 2019).

<https://www.polygon.com/2019/7/28/8934013/fortnite-world-cup-winner-solos-prize-pool>

Fortnite World Cup. Wikipedia. (March 12, 2020) https://en.wikipedia.org/wiki/Fortnite_World_Cup

ⁱⁱⁱ Gough, Christina. Revenue of the global esports market 2018-2025. Statista. August 6, 2021.

<https://www.statista.com/statistics/490522/global-esports-market-revenue/>

^{iv} Media & Entertainment / eSports Market. Fortune Business Insights. May 2023.

<https://www.fortunebusinessinsights.com/esports-market-106820>

^v Lexico powered by Oxford. e-sports. <https://www.lexico.com/en/definition/e-sport>

^{vi} Esports Earnings. <https://www.esportsearnings.com/history>

New data is steadily accruing each year. Click through the years links to see past accomplishments.

^{vii} Collins, Dani Lee, How Much do Pro League of Legends Players Make? SVG. (January 26, 2023).

<https://www.svg.com/164026/how-much-money-do-pro-league-of-legends-players-make/>

^{viii} Ranked Solo Queue is a competition mode in some games for players to compete against other players. Player ranking increases when they when consistently. As their rank improves, they are matched against players of similar level. Those who achieve the highest levels are considered an elite group. Teams recruiting players for colleges and professional leagues look at these players and may invite them to tryout.

^{ix} Out of 8 million students participating in high school sports in the United States, only 495,000 get a spot on a collegiate team.

Probability of Competing Beyond High School. NCAA. <http://www.ncaa.org/about/resources/research/probability-competing-beyond-high-school>

Only .9 to 9.8% of the 480,000 collegiate athletes get a spot in professional sports.

Estimated probability of competing in professional athletics. NCAA.

<http://www.ncaa.org/about/resources/research/estimated-probability-competing-professional-athletics>

^x James, Nicholas. What is the League of Legends player count in 2022? WIN. January 10, 2022.

<https://win.gg/news/what-is-the-league-of-legends-player-count-in-2022/>

Spezzy. How Many People Play League of Legends? LeagueFeed. (January 1, 2022). <https://leaguefeed.net/did-you-know-total-league-of-legends-player-count-updated/>



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-
- ^{xi} Baumbartl, Rosa. 13 Multiplayer Games With the Highest Player Count. The Gamer. June 30, 2023. <https://www.thegamer.com/multiplayer-games-with-large-player-base/>
- ^{xii} ISTE Standards for Students. ISTE. <https://www.iste.org/standards/for-students>
- ^{xiii} McCarthy, John. Frameworks for Fostering the Skills Student Need for the Future. Edutopia. May 21, 2019. <https://www.edutopia.org/article/frameworks-fostering-skills-students-need-future>
- ^{xiv} Ratings Guide. ESRB Entertainment Software Rating Board. <https://www.esrb.org/ratings-guide/>
- ^{xv} ESRB rates games for age appropriate content. School use the ratings to aide in decision making about which games to approve for experiences and competition by students. <https://www.esrb.org/ratings-guide/>
- ^{xvi} Anderson, Monica and Jingjing Jiang. Teens, Social Media and Technology 2018. PEW Research Center. May 31, 2018. <https://www.pewresearch.org/internet/2018/05/31/teens-social-media-technology-2018/>
- ^{xvii} Schaffhauser, Dian. Researchers Find SEL Gains for Students in Esports. THE Journal. August 25, 2020. <https://thejournal.com/articles/2020/08/25/researchers-find-sel-gains-for-students-in-esports.aspx>
- ^{xviii} NASEF offers curriculum resources at: <https://www.esportsfed.org/resources/curriculum/>
- ^{xix} The Esports Learning Guide for Teachers and Coaches was developed by educators under support by Advanced Learning Partnerships and Dell Computers. To get a copy contact: Professional_Learning@Dell.com
- ^{xx} REMC. Esports Amplified. <https://www.remc.org/classroom-resources/esports-amplified/>
- ^{xxi} McCarthy, John. Frameworks for Fostering the Skills Students Need for the Future. Edutopia. (May 21, 2019) <https://www.edutopia.org/article/frameworks-fostering-skills-students-need-future>
- ^{xxii} Gray, Kevin. As Their Focus on GPA Fades, Employers Seek Key Skills On College Grads' Resumes. National Association of Colleges and Employers (November 15, 2022). <https://www.nacweb.org/talent-acquisition/candidate-selection/as-their-focus-on-gpa-fades-employers-seek-key-skills-on-college-grads-resumes/>
- ^{xxiii} ISTE Standards for Students. ISTE. <https://www.iste.org/standards/for-students>
- ^{xxiv} Age Band Articulation. MITECS. https://www.techplan.org/downloads/all_user_files/age_band_articulation.pdf
- ^{xxv} Quaglia Institute for School Voice and Aspirations. (2016.) School voice report 2016. Retrieved from http://quagliainstitute.org/dmsView/School_Voice_Report_2016, J. (2018, December 24).
- Student Voice: A growing movement within education that benefits students and teachers. Center on Transition. Retrieved from: <https://centerontransition.org/publications/download.cfm?id=61> (April 2017)
- McCarthy, John. (2015, September 16). Establishing a Culture of Student Voice. In Edutopia. Retrieved from <https://www.edutopia.org/blog/establishing-culture-of-student-voice-john-mccarthy>
- ^{xxvi} Perrin, Andrew. 5 facts about Americans and video games. Pew Research Center: FactTank. (September 17, 2018) <https://www.pewresearch.org/fact-tank/2018/09/17/5-facts-about-americans-and-video-games/>
- ^{xxvii} Interviews occurred with educators in several states, sometimes from different schools and school systems in states, including Texas, Michigan, Illinois, California, Albuquerque, New York, Massachusetts, Wisconsin, Indiana, and Pennsylvania. Inclusiveness was a common theme from all the interviews.



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^{xxxviii} Dr. Hueber, Charles M. Esports: A Key in Student Retention. Association for the Promotion of Campus Activities. <https://apca.com/esports-a-key-in-student-retention/>

^{xxxix} Dr. Steinkuehler, Constance. Building Community. NACEF. 2017. <https://www.nasef.org/resources/research/building-community/>

^{xxx} Duggan, Maeve. Gaming and Gamers. “Who plays video games and identifies as a “gamer””. Pew Research Center. (December 15, 2015) <https://www.pewresearch.org/internet/2015/12/15/who-plays-video-games-and-identifies-as-a-gamer/>

^{xxxxi} Online gaming culture has a history of toxicity to others. Women tend to be a major target of bad behavior and harassment. Resources like the Esports Learning Guide for Teachers and Coaches provides modules on culture and gender equity and inclusivity that teachers can use to teach and coach their students on proper professional behavior. To get a copy, and other esports references, at REMC: Esports Amplified - <https://www.remc.org/classroom-resources/esports-amplified/> or use the direct link: https://www.remc.org/downloads/remc_assets/esportslearningguide-teacherscoaches_v5_03142023.pdf

Xiao, Tony, Confronting Toxicity in Gaming: Going Beyond “Mute”. The Learning Network. The New York Times. (June 6, 2019) <https://www.nytimes.com/2019/06/06/learning/confronting-toxicity-in-gaming-going-beyond-mute.html>

^{xxxii} Friedman, Sara. Girls Who Game Program Provides Access to STEM Opportunities. THE Journal. (October 14, 2019) <https://thejournal.com/articles/2019/10/14/girls-who-game-program-provides-access-to-stem-opportunities.aspx>

^{xxxiii} Diversifying Student Participation. NASEF. 2020. <https://www.nasef.org/resources/research/diversifying-student-participation/>

^{xxxiv} Quaglia Institute for School Voice and Aspirations. (2016.) School voice report 2016. Retrieved from http://quagliainstitute.org/dmsView/School_Voice_Report_2016, J. (2018, December 24).

Student Voice: A growing movement within education that benefits students and teachers. Center on Transition. Retrieved from: <https://centerontransition.org/publications/download.cfm?id=61> (April 2017)

McCarthy, J. (2015, September 16). Establishing a Culture of Student Voice. In Edutopia. Retrieved from <https://www.edutopia.org/blog/establishing-culture-of-student-voice-john-mccarthy>

^{xxxv} Fortune Business Insights. May 2023. <https://www.fortunebusinessinsights.com/esports-market-106820>

^{xxxvi} Gough, Christina. eSports audience size worldwide from 2019 to 2024, by type of viewers. Statista. June 1, 2021. <https://www.statista.com/statistics/490480/global-esports-audience-size-viewer-type/>

^{xxxvii} 2021 World Championship [Worlds 2021] <https://escharts.com/tournaments/lol/worlds-2021>

Webb, Kevin. More than 100 million people watched the 'League of Legends' World Championship, cementing its place as the most popular esports. Business Insider. (December 18, 2019) <https://www.businessinsider.com/league-of-legends-world-championship-100-million-viewers-2019-12>

LoLEsports Staff. 2019 World Championship Hits Record Viewership. Riot. <https://nexus.leagueoflegends.com/en-us/2019/12/2019-world-championship-hits-record-viewership/>

^{xxxviii} Clement, J. Global Twitch IAP revenue as of Q2 2021. Statista. September 22, 2021. <https://www.statista.com/statistics/517907/twitch-app-revenue/>



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Active streamers on Twitch worldwide 2021. Statista. January 10, 2022.
<https://www.statista.com/statistics/746173/monthly-active-streamers-on-twitch/>

^{xxxix} What is NACE. <https://nacesports.org/about/>



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