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HOUSE OF REPRESENTATIVES

COMMONWEALTH of PENNSYLVANIA

House Democratic Policy Committee Hearing
Subcommittee Progressive Policies for Working People
Esports and the Economy
Wednesday, April 19, 2023 | 10 a.m.
Representative Danilo Burgos

OPENING REMARKS

10:00 a.m. Rep. Danilo Burgos, D-Philadelphia

ROUNDTABLE DISCUSSION

10:10 a.m. <u>Samantha Bickel</u>, Executive Director

Pennsylvania Interscholastic Esports Association (PIEA)

Bill Thomas, founding Board Member

PIEA

<u>Dr. Jennifer Metz</u>, Ph.D, Associate Professor, Esports Management

Harrisburg University

Ishmael Hall, General Manager

Localhost Philadelphia

Q & A with Legislators

TOUR

11:00 a.m. Tour of Localhost by Nerd Street

Tour of Netrality's Data Center

12:00 p.m. Lunch



OFFICE A HOUSE DEMOCRATIC POLICY COMMITTEE

REPRESENTATIVE RYAN BIZZARRO, CHAIRMAN

Esports and the Economy Fact Sheet

Esports, short for electronic sports, are video games played in organized competitive environments for spectators or viewing public.

Gaming Population

Today, K-12, vocational schools, higher education and professional organizations engage in esports.

- Almost 70% of U.S. population play video games, a group that includes an estimated 215 million people.
- This includes nearly 90% of all high school age Americans.
- That figure is split almost evenly among genders, with 52% of gamers identifying as male and 48% identifying as female.
- Professional esports, however, is dominated by white males, making up about 70% of the industry.

Education

Why should esports matter for PA schools?

 Of those who consider themselves gamers, about 70% seek STEM degrees in college.

- Also, in a study conducted in 2019, titled Enriching Esports:
 Assessment of an After School Esports Program for Teens,
 researchers found that students who participated in structured esports programs had significant growth in their academic and social emotional learning. And in a similar 2020 study, researchers found consistently high performances on the metrics observed relating to academic and social-emotional learning.
- An earlier study in 2016 conducted by the World Economic Forum showed the connection between gaming and social-emotional learning, and how those skills are vital for future workforces. In addition, the Organization for Economic Cooperation and Development issued a research paper that said, "social and emotional skills will play a pivotal role in improving children's chances of success in facing the challenges of the 21st century."
- Funding for this after-school activity can be an issue, with start-up costs for equipment and supervisor/coaches ranging from \$10K-\$15K for esports.

Pennsylvania Interscholastic Esports Association (PIEA)

Regulated environment for scholastic esports improves outcomes.

- Research has shown that outcomes for students in regulated and supported high school programs are significantly higher versus those students who did not participate in regulated programs.
- Research also shows that supported esports programs allowed students to connect with their school in a more positive and substantive way.
- More than 160 high schools in PA are already members of or participating in the Pennsylvania Interscholastic Esports Association (PIEA). This includes 1,200+ students. Find out what schools have PIEA teams here.

- PIEA provides oversight and serves as the governing body for PA high school esports and promotes STEM. Learn more here.
- PA holds esports state championships in various game titles during two "seasons."
- The most recent state championships occurred in the Fall of 2023, with two live in-person semifinal events in December, one in Bridgeville – which is located outside Pittsburgh, and one at Saint Joseph's University in Philadelphia.
- The Spring PIEA state championships will take place in May and once again be held in Pittsburgh and Philadelphia, this time at Pittsburgh Technical College and at Nerd Street Gamers Localhost.
- At the state championships, esports players from Penn Manor High School (Lancaster County) were offered scholarships to Robert Morris University.

Promoted by Schools/Colleges

It's no longer unusual for higher education to have an esports varsity team, including Harrisburg University – which is located within walking distance of the state Capitol complex and recently hosted more than 60 higher education esports teams.

- The Washington Post covered Harrisburg University's investment in the then-emerging esports in 2019.
- Colleges are looking to attract a new type of student, but not just for software/gaming career-oriented students, but for any type of careers in STEM since it helps expose the next generation to the use of digital technology at a young age.
- Colleges, like Harrisburg University, have direct degree programs focused on the esports industry, including esports management, broadcast, streaming, and tournament/event planning.

Workforce Development/Careers

- Esports is one of the fastest growing, emerging industries in North America.
- There is a significant "skill gap" related to those who have the specific knowledge and experience to operate within the esports industry. From infrastructure development to streaming and broadcast.
- But aside from the specific esports industry, the skills developed by esports players and enthusiasts can be applied to many other fields, including data-sciences, software development, web development, coding, information and communications technologies, scientific research, engineering, and mathematics and statistics.
- Also, the general live-event and streaming/broadcasting industries are relevant to esports players and fans, including careers in event organizing, legal and the law around streaming and live events, general broadcasting and communications, social media management, and others.
- A recent study highlights the link between scholastic and collegiate esports programs and career development.
- The state of Georgia has invested resources and funding to build an esports career pipeline that has been very successful, particularly for the city of Atlanta.





Thank you to the members of the House Majority Policy Committee, especially Chairman Bizzarro and Rep. Burgos, for shining a light on the topic of esports and its impacts on the future of Pennsylvania.

Over the last several years, the Pennsylvania Interscholastic Esports Association (PIEA) has worked hard to bring esports to the forefront and has advocated for more high schools and community groups across the Commonwealth to establish official esports teams and programs.

Esports is already having an impact on education – both at the scholastic and collegiate levels. And it is creating exciting new developments in workforce and economic development; opportunities not only in an emerging new industry, but a renewed interest in high tech, highs kill, high wage careers.

So, thank you again for the opportunity to discuss how esports will impact Pennsylvania's future economy.

Who is the PIEA?

The <u>Pennsylvania Interscholastic Esports Association (PIEA)</u> is one of the first governing bodies solely focused on scholastic esports in the country. The PIEA is a non-profit entity established in 2019 to promote esports in schools across the Commonwealth and provide a regulatory framework that ensures the integrity of competitions and the safety of students.

Through governance and regulation, the PIEA supports and promotes esports throughout Pennsylvania. As a statewide governing body, similarly to traditional sport governing agencies, our aim is foster esports as a viable high school and middle school activity and increase the awareness of the benefits of esports in the academic and social-emotional growth of students. The PIEA hosts the only events in Pennsylvania that are a path to a recognized State Championship in various video game titles.

The PIEA also works with lawmakers, schools, colleges, and other educational establishments to create policies that enhance esports opportunities. The PIEA Board of Directors is comprised of members representing teachers, school administrators, athletic directors, and state elected officials, all striving to grow innovative programs that help students succeed.

Currently, PIEA has more than 160 schools and 1,200-plus students in its network.

What is esports?

Esports, or competitive video gaming, is an activity where people play videos games against each other in a competitive environment. Esports has been around for decades, even before the boom of the internet, and is played at all levels, from middle and high school programs and collegiate

competitions to amateur and professional leagues. Over the last five years, esports has grown into the most popular spectator sport in the world.

Esports is an inclusive medium that welcomes players from many different backgrounds. Esports is highly diverse and open to all potential participants, regardless of physical ability or disability. And esports is often coed, with players from all genders competing together.

Esports can be played on different platforms, including computers, laptops, or gaming consoles. And depending on the game, the format can be team based or solo competitions. Currently, there are close to 40 different recognized esports titles that are broken down into types of games. This includes:

- Multiplayer online battle arena (MOBA) games
- First-person shooter games (FPS)
- Sports-based and simulated traditional sports games

The Pennsylvania Interscholastic Esports Association, through its Board of Directors and Competition Committee, are selective in the types of games it sanctions. We utilize a rating system for our State Championship competitions and do not sanction any game title that depicts real world or simulated graphic violence.

Why esports?

Video games are extremely popular with our youth and have become a significant part of our student's lives. That popularity has exploded over the last several years, primarily thanks to the increasingly social nature of games like Fortnite and Minecraft, and the advancement of entertainment platforms that allow video game players to stream their gameplay to millions of fans. Video games today have grown into truly social communities that are shaping modern relationships and providing positive outcomes for our youth.

A study conducted by the Pew Research Center showed that more than <u>95 percent of high school</u> <u>age boys and nearly 85 percent of high school age girls</u> play video games. The study also showed that teenagers believe they are making friends through playing video games, staying connected with their peers and strengthening relationships with their siblings. And nearly half of students surveyed believe gamification of learning would create more interest in school and provide greater academic success.

And it makes sense, since video gaming today, especially through competitive esports, has found a way to combine streaming and social networking in a way the has revolutionized the way new generations consume their entertainment.

So, what does this mean for school districts across the Commonwealth?

Done appropriately, and with the proper oversight and regulations in place, implementing esports programs in high schools and middle schools can leverage the popularity and social nature of modern video games into increased engagement in school activities.

With so many students playing video games, it is safe to say that some of those students are involved in other school activities, clubs, or sports. But many are not. Offering esports programs as an extracurricular activity is a way schools can boost engagement, particularly among students who aren't otherwise involved.

This is important because <u>research has long shown that students who are more involved and engaged often have higher successful outcomes</u>, such as higher graduation rates, more class participation and greater social interaction with peers.

And specifically to esports, recent studies link a <u>positive correlation between students who play video games and higher academic achievement</u>. Research shows that students who play video games tend to have higher math achievement, accelerated language learning and technology fluency, as well as improved digital and print literacy.

Additional studies show that <u>video games can help improve and teach</u> teamwork, social skills, strategic thinking, and time management and organizational skills. Research also makes the case that playing video games can improve visual acuity and attention, increase problem solving skills, and foster scientific reasoning.

The correlation is not just academic success, but social success as well. According to the National Federation of High School Associations, students who participate in school activities are less likely to engage in risky behaviors, such as underage drinking or drug-use, as well as a reduced risk of suicidal tendencies. Again, specific to esports, researchers at the University of California Irvine (UCI) and its Connected Learning Lab (CLL), an Organized Research Unit of more than 30 faculty members dedicated to studying and mobilizing learning technologies in equitable, innovative, and learner-centered ways, found that students participating in esports programs as part of a recognized high school sport or activity "showed significant development" in social-emotional skills and characteristics. And most importantly, researchers found that students in lower-income communities benefited the most from supported esports programs.

In a study conducted in 2019, titled <u>Enriching Esports: Assessment of an After School Esports</u> <u>Program for Teens</u>, UCI and CCL researchers surveyed 300 students, with half of those students participating in high school esports programs.

The researchers at UCI and CCL found that students who participated in scholastic esports programs had significant growth in their social emotional learning, including skills related to mentorship, modeling, affiliation, equity, teamwork, communication, and leadership. Not only did researchers find growth in these skills, but students themselves said they placed a greater focus on their own social-emotional health, including realizations of perseverance, empathy, critical thinking, sense of belonging, school engagement and spirit, and working harder on academic success.

Also, additional research has shown that regulated high school esports programs are helping to reduce overall video gameplay by participants. Instead, students who are part of official school programs are focused on remaining "eligible" to play competitively for the official school esports team. Including an official esports program as part of a school's offering also provides a monitored and balanced space for video game play, and can teach positive, effective, and appropriate online

behaviors that limit cyberbullying, inappropriate comments and toxicity that is a part of the unregulated online video gaming community.

Esports also has a compelling relationship to workforce development and job creation. Esports is creating thousands of new jobs. This, in turn, is creating a fresh demand for people with specific and unique skills, and currently, as the demand for esports content continues to grow, there is a significant skills gap for jobs within the esports industry. This has led to colleges and universities across the country, including Harrisburg University here in Pennsylvania, to create esports specific degree programs and offer scholarships to play esports at the collegiate level.

Esports' impact on the workforce goes beyond just the esports industry. A recent study entitled <u>Understanding Esports as a STEM Career Ready Curriculum in the Wild</u>, shows that students who participate in esports programs and competitions exhibit skills that connect to STEM-related entrepreneurship and high tech sector jobs not only in the gaming industry but also in data science, software and web development, social media marketing, and event organizing.

Simply put, esports creates a significant opportunity for school districts and administrations to utilize the immense popularity of video games and incorporate it into curriculum, extracurricular activities, and social-emotional learning programming by supporting the development of school-sanctioned esports teams and clubs.

But regulation and oversight are KEY!

The PIEA is the only esports organization in Pennsylvania that provides governance and regulatory oversight of scholastic esports competitions. The PIEA emphasizes the safety of players and has implemented several measures to protect the wellbeing and identities of those who take part in PIEA sanctioned competitions.

In addition, all players competing in PIEA events are expected to conduct themselves in a manner that reflects positively on the competition and the schools they represent.

The PIEA requires all players, coaches, and affiliated members to follow a detailed code of conduct. And we have established regulations that govern eligibility, residency requirements and minimum academic standards, as well as target cheating, gambling, bullying, and other behaviors impacting the integrity of esports competitions.

The PIEA takes harassment and other toxic behavior very seriously. We expect and require all participants to treat others with respect, and to refrain from harassing other players through certain behaviors and inappropriate language while playing games or while communicating through any apps or social media in connection with our games or events.

School boards, administrators, parents, and students must trust that esports programs are focused on the interest of students first. The PIEA was created to provide the regulatory framework and governance necessary to build that trust and protect Pennsylvania's students while using innovative learning opportunities to help boost student success.

The PIEA strongly supports state investments in programs at the middle and high school levels because funding is the primary barrier for any school to enter the esports space. Providing a

regulated environment allows for greater state and local investment in these programs, which is key in expanding opportunities for all students.

Thank you again for the opportunity to address the committee on such an important topic. If you have any questions or concerns or wish to work with us to help any of your school districts establish official esports programs, or to join the PIEA, please let us know!

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