Voice of Intercollegiate Esports (VOICE)

Benefits of Collegiate Esports Study:

FULL METHODOLOGY AND RESULTS

by

Lead Researcher:
Seth E. Jenny, Ph.D.
Department of Exercise Science
Slippery Rock University of Pennsylvania

Statistician:
David P. Schary, Ph.D.
Department of Physical Education, Sport, and Human Performance
Winthrop University

Collaborators:
Jesse Bodony, M.A.
VOICE and Pace University

Russell Hamer, Ph.D.
VOICE and Miami University

Data Collection Dates: 2 December 2024 to 20 February 2025

Results Submission Date: 30 April 2025

Recommended Citation:
Jenny, S. E., Schary, D. P., Bodony, J., & Hamer, R. (2025). Benefits of Collegiate Esports Study: Full Methodology and Results. *Voice of Intercollegiate Esports (VOICE)*. https://www.voicecollegiate.org

Contents

Results

Diversity and Inclusion: Gender
- *Table 18. Gender of Student Body and Varsity Esports Players*

Diversity and Inclusion: Race/Ethnicity
- *Table 19. Race/Ethnicity of Student Body and Esports Players*

Diversity and Inclusion *(and Student Recruitment)*: International Students
- *Table 20. International Students in Student Body and Varsity Esports Program*

Diversity and Inclusion: Disability
- *Table 21. Percentage of Student Body and Esports Players with a Disability or Long-term Health Condition*

Extracurricular Activity: Exposure to New Extracurricular Activity
- *Table 22. Self-reported Extracurricular Activities Performed in High School by Collegiate Esports Players*

Academics: Grade Point Average (GPA) of Esports Players
- *Table 23. Grade Point Average (GPA) of Esports Players by University*

Academics: GPA of Student Body vs. GPA of Esports Players

Academics: GPA of Traditional Sport Athletes vs. GPA of Esports Players
- *Table 24. Grade Point Average (GPA) of Student Body, Traditional Sport Varsity Athletes, and Esports Players*

Academic Majors: Esports Player Academic Majors

Academic Majors: Science, Technology, Engineering and Math (STEM)
- *Table 25. STEM vs. Non-STEM Academic Majors Self-reported by Esports Players*

Academic Majors: Top Student Body Majors vs. Esports Player Majors
- *Table 26. Most Prevalent Bachelor's and Master's Degree Programs by Field of Study at each Institution vs. the Top Esports Player Majors at that Institution*

Enrollment and Recruitment: Reason Players Selected their Current University
- *Table 27. Top Self-reported Reasons Esports Players Selected their Current University*
- *Table 28. Individual Institution Top Themes: Collegiate Esports Player's Single Main Reason for Selecting Current University*

Enrollment and Recruitment: Esports Program's Impact on Attending Current University
- *Table 29. Esports Players' Perceived Impact of the Esports Team's/Club's/Program's on Attending Their Current University*

Enrollment and Recruitment: Players First Awareness of Competitive Esports Program
- *Table 30. Ways Esports Players Reported First Becoming Aware of their University's Competitive Esports Program*

Enrollment and Recruitment: Competitive Esports Program Player Recruitment
- *Table 31. Esports Players Recruited by the Esports Program as Reported by Esports Directors and Players*

Enrollment and Recruitment: Attended Because of Esports Program Recruitment
- *Table 32. Esports Players' Perceived Impact of the Esports Recruitment on Attending Their Current University*

Enrollment and Recruitment: Attended Because of Esports Academic Program
- *Table 33. Esports Players' Perceived Impact of Attending Their Current University based on the Esports Academic/Degree Program*

Enrollment and Recruitment: Recruitment Methods
- *Table 34. Collegiate Esports Player Recruitment Utilized by VOICE-affiliated Esports Directors and Staff*

Enrollment and Recruitment: Out-of-State Esports Players

Enrollment and Recruitment: Current University 100+ Miles Away from Home
- *Table 35. Institution Out-of-State Students vs. Out-of-State Esports Players and Esports Players Attending University More Than 100 Miles from Their Permanent Home*

Enrollment and Recruitment: Transferred to Current University
- *Table 36. Institution Total Transfer-In (Undergraduate) Students vs. Transfer-In Esports Program Players*

Esports Scholarships: Full Esports Scholarships

Esports Scholarships: Partial Esports Scholarships
- *Table 37. VOICE-affiliated Varsity Esports Player Scholarships*

Esports Scholarships: Student Body Scholarships/Financial Aid vs. Esports Scholarships
- *Table 38. Student Financial Aid and Graduate Assistantships compared to Varsity Esports Player Scholarships*

Retention and Graduation: Esports Players Planning on Staying at their University
- *Table 39. Collegiate Esports Players' Response to: "Do you plan to stay at your current university until you graduate?"*

Retention and Graduation: Esports Program's Impact on Player Perceived Retention
- *Table 40. Regarding "Do you plan to stay at your current university until you graduate?" and "How has the esports program impacted your decision to stay at or leave your current university?" with Representative Player Quotes*

Enrollment and Recruitment: Staying Because of Esports Academic Program
- *Table 41. Esports Players' Perceived Impact of Staying Their Current University based on the Esports Academic/Degree Coursework*

Retention and Graduation: Student Body vs. Esports Player Retention Rates
- *Table 42. University Retention Rates vs. Esports Program Retention Rates alongside Player "Intention to Stay"*

Retention and Graduation: Graduation Rate
- *Table 43. University Graduation Rates vs. Esports Program Graduation Rates*

Perceived Skills Learned & Development from Collegiate Esports: Players

Non-player Collegiate Esports Roles

References

Contributors

- **Primary Investigator/Lead Researcher**: Seth E. Jenny
- **Statistician:** David P. Schary
- **Conception & Design of the Study**: Seth E. Jenny, Jesse Bodony, & Russell Hamer
- **Data Collection**: Seth E. Jenny & Joshua Riesenberg (*publicly available institution data*)
- **Data Analysis & Results**: Seth E. Jenny & David P. Schary
- **Report Authorship**: Seth E. Jenny, David P. Schary, Jesse Bodony, & Russell Hamer

Primary Research Question

What are the potential benefits of having a collegiate esports program?

Key Variables of Interest

Diversity and Inclusion
- Gender
- Race/Ethnicity
- International Student Status
- Disability

Extracurricular Activity
- Exposure to New Extracurricular Activity

Academics
- Average Grade Point Average (GPA)
- GPA: Esports Players vs. Student Body
- GPA: Esports Players vs. Traditional Sport Athletes

Academic Majors
- Esports Player Academic Majors
- Science, Technology, Engineering and Math (STEM) Majors
- Esports Player Majors vs. Student Body

Enrollment and Recruitment
- Reason Players Selected their Current University
- Esports Program's Impact on Attending Current University
- Awareness of Competitive Esports Program
- Competitive Esports Program Player Recruitment
- Out-of-State Esports Players
- Current University 100+ Miles Away from Home
- International Student Status (*see Diversity and Inclusion section)*
- Transferred To Current University
- Esports Scholarships

Retention and Graduation
- Retention Rate
- Graduation Rate

Program Improvement
- Player Perceptions of How to Improve Competitive Esports Program

Perceived Benefits of Esports
- Reasons to Play Collegiate Esports
- Perceived Benefits of Collegiate Esports
- Perceived Player Gains from Collegiate Esports
- Perceived University Gains from Collegiate Esports
- Top 5 Benefits of Collegiate Esports

Perceived Skill Development from Esports
- Skills Learned and Developed
- Collegiate Esports Roles

Definition of Terms

- "**Academic Esports Program**" = academic curriculum, certificates, and/or degree programs centering on esports education.

- "**Competitive Esports Program**" = esports teams that focus on competing in esports against others.

- "**Casual/Recreational Video Gaming**" = informal video gaming involving no formalized player-to-player competition (Jenny et al., 2025).

- "**Esports**" = organized competitive video gaming between human players with in-game and out-of-game rules and policies (Nothelfer et al., 2024).

- "**Collegiate Esports**" = esports competitions involving college or university students, or between college- or university-supported varsity or club esports teams.

- "**Varsity Esports**" = institution/staff-driven esports program where the top team at that university plays other university esports teams. *Note*: club-level teams may also exist using the same game title at the same university.

- "**Club Esports**" = student-driven esports program, but club teams may still play other university esports teams (i.e., not simply intramurals).

Methodology

Design and Participants

This study examined the potential benefits to having a competitive collegiate esports program. Sampling centered on the 12 Voice of Intercollegiate Esports (VOICE; https://www.voicecollegiate.org)-affiliated universities. To anonymize the data and protect confidentiality, the following consistent pseudonyms are used throughout this report: University 1, University 2, University 3, University 4, University 5, University 6, University 7, University 8, University 9, University 10, University 11, and University 12.

A mixed-method cross-sectional exploratory design employing surveys with quantitative (i.e., closed-response) and open-response questions were used. Three different online surveys were administered to three different groups of participants: (a) VOICE-affiliated esports directors ($n = 12$), (b) VOICE-affiliated esports staff ($n = 14$; i.e., non-directors), and (c) VOICE-affiliated esports players ($n = 252$; completed entirely, $n = 198$). In addition, comparative analysis was utilized with each institution's student body data, as well as further triangulation of "varsity esports player spreadsheet" roster data ($n = 598$ players), which were completed by all but one VOICE-affiliated esports director.

Surveys

All surveys utilized the online survey platform Qualtrics (https://www.qualtrics.com). Survey questions were created based upon the study's aims and past research regarding the benefits of esports, gaming, or recreational sports, particularly within scholastic environments (i.e., Akkaya, 2021, Aranas et al., 2021; British Esports Association, 2019; Buzzelli & Draper, 2021; Dekker & Slotboom, 2023; Delello et al., 2021, Delello et al., 2023; Delello et al., 2025; Feng, 2024; Guo, 2020; Huk, 2019; Ke & Wagner, 2022; Keith et al., 2021; Lee et al., 2021; Mora-Cantallops & Sicilia, 2019; National Intramural-Recreational Sports Association, 2000; Postell & Narayan, 2023; Rothwell & Shaffer, 2019; Scholz & Nothelfer, 2022; Steinkuehler, Anderson, et al., 2023; Steinkuehler & Reitman, 2020; Steinkuehler et al., 2019a, 2019b; Zomer et al., 2021).

The esports director survey was comprised of 38 total questions, including 9 questions relating to personal and esports job-related demographics, 3 open-ended questions and 1 ranking question relating to the perceived top five benefits of collegiate esports, 1 open-ended question targeting the perceived skills players may learn and develop from collegiate esports, 19 esports program questions (e.g., housing of program, type of competitive programs, game titles played, leagues played, number of players, facilities, scholarships, etc.), 2 esports education (i.e., esports academic programming) questions, and 3 questions centering on esports player recruitment, retention, and graduation. This survey took about 15 to 25 minutes to complete. As a form of appreciation, all VOICE-affiliated esports directors who completed the director survey and varsity esports player spreadsheet were given a $25 Amazon (https://www.amazon.com) eGift card. For further encouragement, directors who attained a 90% or more player survey response rate were offered an additional $50 Amazon eGift card, but no director earned this additional incentive.

The esports staff (i.e., non-director) survey replicated the director survey, but omitted many of the esports program management-related questions (e.g., budget, facilities, scholarships, etc.). The survey included 16 total questions, including 9 personal and esports-related demographic questions, 2 rating-style questions centering on the perceived competitiveness of the program and top five benefits of collegiate esports, 1 recruitment question, 3 open-ended questions on the benefits of collegiate esports, and 1 open-ended question about perceived skills players may learn and develop from collegiate esports. This survey took about 5 to 10 minutes to complete.

The esports player survey comprised of 40 total questions, including 5 personal demographic questions, 5 university-related questions (e.g., major, grade point average, etc.), 5 enrollment and recruitment questions (e.g., transfer status, out-of-state or international student status), 2 open-ended questions targeting the single main reason they selected their current university and how they first became aware of their university's esports

program, 2 esports scholarship questions, 3 Likert-scale (1 = not at all; 4 = that is the main reason why I chose my Current University) questions relating to enrollment and recruitment motivations, 4 retention questions (including 1 open-ended and 2 Likert-style questions), 6 collegiate esports experience questions (e.g., type of player, game played, years of collegiate esports experience, etc.), 6 open-ended questions focusing on why they play collegiate esports, the perceived benefits of collegiate esports, how they would recommend improving their collegiate esports program, and the skills they have learned and developed from participating in esports, 1 question relating to non-player collegiate esports roles they have performed (e.g., coach, broadcaster, etc.), and 1 ranking question about the perceived top five benefits of esports. This survey took about 10 to 15 minutes to complete. Upon completion of the survey, as an incentive and form of appreciation, players could click a separate link to enter a random drawing where one player from each of the VOICE-affiliated institutions could have the chance to win a $25 Amazon eGift card. This separate survey did not associate responses to the main study.

Of note: across all three surveys (director, staff, and player), open-response questions were always listed first on the survey so that respondents were not influenced by subsequent "check all that apply" list-style questions that covered a similar topic – i.e., "*Please describe, in detail, the BENEFITS of collegiate esports*: [open response]" was asked first, prior to "*Across all categories, select the Top 5 Areas that BENEFIT you the MOST regarding your participation in Collegiate Esports*? *(Read over all options and select your Top 5, which can come from a combination of any categories)*".

Varsity Esports Player Spreadsheet
The VOICE-affiliated collegiate esports program directors were also asked to complete a Microsoft Excel esports player spreadsheet comprising of their entire varsity rosters. "Varsity" was defined as any esports player who represented their university and played intercollegiately against other university esports players/teams. For each player, the following seven items were collected: (a) esports team (i.e., game title), (b) academic year classification (i.e., freshman, sophomore, junior, senior, or graduate student), (c) gender (i.e., male, female, transgender, non-binary), (d) current grade point average (GPA), (e) Did you actively recruit this student? (Yes, No), (f) Is this student on an esports scholarship? (Yes, No – if "Yes", list type: Full, Partial, GA, or Other), (g) Is the player an out-of-state student? (Yes, No), and (h) Is the player an international student? (Yes, No). The name column was deleted by the director to anonymize the data prior to sending this spreadsheet back to the lead investigator.

Procedures
Institutional Review Board (IRB) approval and participant consent were obtained prior to the start of the study. All three surveys were piloted by one institution in December 2024. Based on this pilot, the only significant changes were the distribution style of the director survey (i.e., sending personalized links so that the directors could stop and continue the survey later if needed), as well as moving the open-ended questions towards the beginning of the director survey. No changes were made regarding the staff or player survey.

For the main study, sampling took place between January and March 2025. All 12 VOICE-affiliated esports directors were sent the esports director online survey and the varsity esports player spreadsheet via email and/or Discord (https://discord.com). All 12 directors completed the survey, resulting in a 100% response rate. The varsity esports player spreadsheet was completed by all VOICE-affiliated institutions except University 8 (*n* = 11; 91.7% response rate), which is a student-driven club program. Several directors had difficulty obtaining player GPA data and some did not want to misgender their players, thus leaving some spreadsheet data incomplete.

The collegiate esports staff (non-director) online survey was sent via email and/or Discord to all staff listed on each VOICE-affiliated program websites. This survey was sent to 20 staff members from 10 different VOICE-

affiliated institutions (i.e., 2 institutions did not have more than one esport-related staff) and was taken by 14 of them (including 1 partial response) from 8 different institutions, resulting in a 70% response rate.

The collegiate esports player survey link was sent to all VOICE-affiliated esports directors and staff members via email and Discord, and they were asked to distribute the survey to their players via email and/or Discord. The directors and staff were also encouraged to give time to their players at the beginning of a meeting or practice to take the survey but were reminded to tell the players to *not* discuss their responses with each other while taking the survey. Directors and staff were also instructed that if they posted the player survey in Discord to post it in channels that only their competitive players have access to (avoiding non-players or alumni in taking the player survey). The esports player survey was forwarded on to all VOICE-affiliated esports program players, except by University 8 (i.e., zero player responses). When cross-referencing varsity esports player spreadsheets (Table 16) and the esports player survey responses up until the university affiliation question (Table 15), each institution's player response rate are as follows: University 1 (n = 10 of 59; 17.0%), University 2 (n = 18 of 56; 32.1%), University 3 (n = 20 of 30; 66.7%), University 4 (n = 25 of 35; 71.4%), University 5 (n = 14 of 23; 60.9%), University 6 (n = 8 of 60; 13.3%), University 7 (n = 20 of 71; 28.2%), University 9 (n = 19 of 81; 23.5%), University 10 (n = 56 of 97; 57.7%), University 11 (n = 3 of 50; 6.0%), and University 12 (n = 17 of 51; 33.3%). The total esports player response rate across the 11 VOICE-affiliated institutions was 34.3% (n = 210 of 613 players), based on the varsity esports player spreadsheet total of 598 players plus 15 additional University 11 players who were not accounted for on the spreadsheet. The player survey was started by 252 players, 210 completed the survey up until the university affiliation question (i.e., *What is your current university?*), and 198 completed the entire survey, resulting in a player survey dropout rate of 21.4% (only the last two questions had less than 202 responses).

Institutional data was collected from November 2024 to February 2025. The majority of this data was publicly available and collected from each institution's institutional research office website (or equivalent institution posted "facts" reports), or from the National Center for Education Statistics (https://ies.ed.gov/national-center-education-statistics-nces) institutional profile. There were three main areas where institutional data could not be found publicly. First, general student body disability data was obtained through personal correspondence via individual institution's office of disability services (or equivalent), but only 3 of 12 institutions responded with this data (25% response rate). Second, each institution's office of academic records (or equivalent) was contacted through personal correspondence asking for the average GPA of the entire student body, undergraduate students, and graduate students. No institution would offer this data except for University 1, which posts this online (8.3% "response rate"). Lastly, each institution's department of athletics was contacted via personal correspondence about the average GPA of all traditional sport varsity athletes, but this information was only obtained from two institutions (16.7% response rate).

Data Analysis
Descriptive Statistics
Descriptive statistics were calculated for a range of continuous, categorical, and ordinal variables across the dataset. Results are primarily presented as means, ranges, and percentages. Ranges were used as opposed to standard deviations to make the report more accessible to a general audience. Data are reported by esports program (i.e., institution) where appropriate, as well as for the overall sample and relevant subgroups. Microsoft Excel (version 2503, 2025) and R (R Core Team, 2023) were utilized for data management and statistical analyses.

Comparative Analyses

Comparative analyses were conducted to explore differences between students involved in collegiate esports and the broader student body (at that same institution, if available). These comparisons focused primarily on categorical variables such as gender, disability status, and other demographic characteristics. Chi-square tests and Z-tests were used to analyze differences (Pagano & Mattie, 2022). All comparisons were exploratory in nature, given the non-experimental survey-based design of the study.

Qualitative Analysis

Open-response survey data for each individual question was first cleaned in Microsoft Word, and then inserted into ChatGPT (https://chatgpt.com) for preliminary analysis, which generated preliminary themes across the responses, while also reporting frequency counts and representative quotes for each theme. Then, as recommended by Creswell and Poth (2018), deeper qualitative analysis included the iterative process of validating the output through open coding of primary categories, axial coding through assembling the data into central categories, and selective coding where final themes were verified through the analysis of the interrelationships of the main coded categories. Often, categories were revised and new categories emerged, as each individual participant quote was evaluated against the preliminary themes. Internal member checks were also employed where a separate member of the research team randomly selected open-response survey data and developed their own variation of the codes and themes to validate the qualitative results (Berg, 2009).

Executive Summary and Forthcoming Academic Publication

An abbreviated "Executive Summary" of this extended results report can be found on the VOICE website (https://www.voicecollegiate.org). Moreover, a forthcoming academic publication that includes interpretation and discussion surrounding this study's findings and implications will be published in an academic journal. A link to this academic paper will be posted to the VOICE website after publication.

Redaction, Anonymization, and Gratitude

Parts of this report have been redacted, and university names anonymized, due to a request by VOICE and some of the participating esports directors to protect program anonymity. Overall, we thank VOICE for their forward-thinking in initiating just a valuable, groundbreaking project. In addition, to our knowledge, this is the largest collegiate esports study ever conducted to date. We extend an abundance of gratitude to all the participants in this study; we could not have collected such an abundance of data or completed this project without your support. Thank you!

Data Collection Websites

Table 1. VOICE-affiliated Institutional Research Office's (or equivalent) and National Center for Education Statistics (NCES) Profile Websites

VOICE-affiliated Institution	Institutional Research Office Website (and Year of Most Recent Data)		National Center for Education Statistics Profile *Academic Year 2023-2024 (Most Recent Available)*
University 1	Website URL Redacted	F2023	Website URL Redacted
University 2	Website URL Redacted	F2024	Website URL Redacted
University 3	Website URL Redacted	F2024	Website URL Redacted
University 4	Website URL Redacted	F2023	Website URL Redacted
University 5	Website URL Redacted	F2024	Website URL Redacted
University 6	Website URL Redacted	F2024	Website URL Redacted
University 7	Website URL Redacted	F2023	Website URL Redacted
University 8	Website URL Redacted	F2023	Website URL Redacted
University 9	Website URL Redacted	F2024	Website URL Redacted
University 10	Website URL Redacted	F2023	Website URL Redacted
University 11	Website URL Redacted	F2024	Website URL Redacted
University 12	Website URL Redacted	F2024	Website URL Redacted

Note. Institutional data was collected from November 2024 to February 2025.

Table 2. VOICE-affiliated Institution's Esports Competitive Team and Academic Esports Program Websites

VOICE Institution	Esports Team Website(s)	Academic Esports Program Website
University 1	Website URL Redacted	Esports Course: Website URL Redacted
University 2	Website URL Redacted	*n/a*
University 3	Website URL Redacted	Website URL Redacted
University 4	Website URL Redacted	Website URL Redacted
University 5	Website URL Redacted	Website URL Redacted
University 6	Website URL Redacted	*n/a*
University 7	Website URL Redacted	Website URL Redacted
University 8	Website URL Redacted	*n/a*
University 9	Website URL Redacted	Website URL Redacted
University 10	Website URL Redacted	Website URL Redacted
University 11	Website URL Redacted	Website URL Redacted
University 12	Website URL Redacted	*n/a*

Note. n/a = no academic esports program. Institutional data was collected from November 2024 to February 2025.

Sample Demographics

VOICE-affiliated Institutions' General Demographics

Table 3. VOICE-affiliated Institutions' Location, Type, and Number of Students

VOICE-affiliated Institution	Location	Year of Data	Institution Type	Total # of Students			
				Total # of Students	Total # of Full-time students	Total # of Undergraduate Students	Total # of Graduate Students
University 1	Redacted	2023	Public	47,946	24,314	19,505	28,441
University 2	Redacted	2024	Private	9,261	4,477	5,692	3,569
University 3	Redacted	2024	Public	22,508	19,763	20,444	2,064
University 4	Redacted	2023-2024	Private	22,948	2,0120	15,739	7,209
University 5	Redacted	2023-2024	Public	33,886	32,773	28,097	4,081
University 6	Redacted	2024	Public	46,678	44,730	33,040	13,638
University 7	Redacted	2023	Public	19,256	16,969	14,576	4,680
University 8	Redacted	2023-2024	Public	33,885	29,755	23,971	8,784
University 9	Redacted	2024	Public	15,019	9,590	11,033	3,483
University 10	Redacted	2023-2024	Public	28,264	22,515	22,046	6,234
University 11	Redacted	2024	Private	47,147	41,339	21,023	26,124
University 12	Redacted	2024	Public	17,700	14,585	10,777	3,420

Note. All data was collected from each institution's Institutional Research Office website (or equivalent institution posted "facts" reports). All institutions reside in the United States.

VOICE-affiliated Institution	Housing of Esports Teams	Types of Competitive Esports Programs			Academic Esports Program?
University 1	Campus Recreation	1-Competitive	2-Casual		Single Esports Course
University 2	Own Department that reports to CFO and President's Office	1-Varsity	2-Community Club		None
University 3	Recreation (Academic Department)	1-Varsity	2-Club		Esports [Redacted] Undergrad Certificate; Master of Esports [Redacted]
University 4	Campus Life (Sports and Recreation)	1-Varsity	2-Club		B.S. Esports [Redacted]
University 5	Division of Student Affairs	1-Varsity	2-Club		Esports [Redacted] Certificate
University 6	Club Sports (Student Life)	1-Varsity	2-Junior Varsity (JV)	3-Club	None
University 7	Redacted (Network of State-system Supported Campuses)	1-Varsity	2-Redacted (Club)		Redacted [Program that Combines Esports with Education]
University 8	Partnerships (Club Sports)	1-Club	*(no varsity)*		None
University 9	Student Life (Academic Affairs)	1-Varsity	2-Club	3-Intramurals (Redacted)	B.S. Esports
University 10	Student Affairs (Redacted)	1-Varsity	2-Club		Esports [Redacted] Undergraduate Certificate
University 11	Redacted (Academic Department)	1-Varsity	2-Redacted (Club)		Game Design (not esports); Esports courses
University 12	Redacted [Academic College]	1-Varsity			Esports [Redacted] Undergraduate Minor

Note. Information provided was retrieved from institution websites or respective esports program directors. "Varsity" = institution/staff-driven esports program where the top team at that university plays other university esports teams; club-level teams may also exist using the same game title. "Club" = student-driven esports program, but club teams may still play other university esports teams (i.e., not simply intramurals). Academic esports program offerings are very dynamic. Redacted academic esports program information removes specificity of esports academic program focus area(s) to protect anonymity.

==Table 5. VOICE-affiliated Institution Self-reported Esports Program Types, Program Categories, and Start Year==

Key:
Staff-driven / Institution-driven = organized and managed by non-student staff hired by the university.
Student-driven = organized and managed by students.
Varsity Esports = University top teams that play against other university teams.
JV / Academy Esports = developmental teams (for the varsity teams) that play against other university teams.
Competitive Club Esports = esports competitions against people from other university teams recreationally.
Casual Club Esports = teams/players that *only* play against people from my own university.

Institution	Program Type(s)		Categories of Competitive Collegiate Esports				Program/Category Notes:	Year Club Esports Start	Year Staff-driven (Varsity) Esports Start
	Staff-driven / Institution-driven	Student-driven	Varsity	JV / Academy	Competitive Club	Casual Club			
University 1		X			X	X		2011-2012	n/a
University 2	X	X	X	X	X	X		2013-2014	2014-2015
University 3	X		X		X	X	+ intramural esports open to non-club members	2012-2013	2015-2016
University 4	X	X	X		X			2017-2018	2024-2025
University 5	X		X					2012-2013	2016-2017
University 6	X	*	X	X		X	*Students manage club teams & work with staff	2017-2018	2020-2021
University 7	X		X	X	X	X		2017-2018	2020-2021
University 8		X			X			2018-2019	2021-2022
University 9	X	*	X				*Staff make rules; student captains lead practices	2019-2020	2020-2021
University 10	X	X*	X				*Volunteer to student worker to GA to 1.0 FTE	2017-2018	2017-2018
University 11	X		X	X				2017-2018	2017-2018
University 12	X	X	X	X		X		2016-2017	2018-2019
% of Total: (*n*=12)	83.3%	50.0%	83.3%	41.7%	50.0%	50.0%		Median: 2017-2018	Median: 2018-2019

Note. n/a = not applicable; * = see "Program/Category Notes" column. Data obtained from the esports director's survey.

Table 6. VOICE-affiliated Esports Program Equipment, Facility, Player, Esports Scholarship, and Budget Information

Institution	Total PC Stations	Total Gaming Consoles	# of Esports Facilities	Combined Esports Facilities Sq. Footage	Total # of Active Competitive Players	Total # of Non-competitive Student Esports Program Members	Tuition-based Annual Esports Scholarships?	Annual Esports Budget (entire sample; n=12)
University 1	0	0	0	n/a	50	500	None	Range: **$15,000-$970,000** USD
University 2	60	15	2	5,000	30	220	**30 Partial** *(fill after other scholarships)*	m = **$211,591** USD
University 3	58	5	5	9,000	56	33	**20 Partial**	
University 4	70	11	3	30,000	35	45	**18 Partial**	• **≤ $50,000** USD
University 5	44	6	1	3,550	25	8	**25 Partial**	(n = 1; 8.3%)
University 6	17	1	1	700	80	30	None	
University 7	60	6	2	4,000	70	30	**5 Partial**	• **$50,001 - $150,000** USD
University 8	68	12	1	5,153	90	300	None	(n = 5; 41.7%)
University 9	43	0	1	2,200	85	13	**Dollar Limit Amount**	
University 10	25	16	1	3,900	100	40	None	• **$150,001 - $250,000** USD
University 11	30	3	2	Unknown	95	150	None	(n = 3; 25.0%)
University 12	49	5	2	Unsure	52	20	**Dollar Limit Amount**	• **≥ $250,001** USD ($n$ = 3; 25.0%) *(includes operations, salaries, travel, registration fees, etc., but does NOT include scholarships)*
Sample Totals:	**Total PC Stations**: n = 11 institutions; Range: 17-70 PCs; m = 47.6 PCs **Total Gaming Consoles**: n = 10 institutions; Range: 1-16 consoles; m = 8 consoles **# of Esports Facilities**: n = 12 institutions; Range: 0-5; m = 1.75 **Combined Esports Facilities Sq. Footage**: n = 9 institutions; Range: 700-30,000 sq. ft.; m = 4,187.9 sq. ft. **Total # of Active Competitive Players**: n = 768 players; Range: 25-100; m = 64 *(esports program members that play against other university esports players)* **Total # of Non-competitive Student Esports Program Members**: n = 1,389 players; Range 8-500; m = 115.8 *(including casual club members, social media, casters, etc.)* **Esports Scholarships**: Full Scholarships = 0 institutions; Partial or Dollar Limit Scholarships = 7 institutions (58.3%); m = $102,200 scholarship budget (n = 5 institutions), Range: $26,000-$270,000 tuition-based annual esports scholarship budgets (n = 5 institutions)							

Note. *n/a* = not applicable. Data obtained from the director survey only. Individual program annual budget and scholarship data was not provided at the directors' request; averages and ranges were provided instead.

Table 7. VOICE-affiliated Institution Paid Esports Staff Positions

Institution	Esports Director		Assistant Esports Director		Esports Coach (any team)		Esports Graduate Assistant		Esports Student Worker		Other
	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time	
University 1										4	
University 2	1		1		2	2	3			6	Full-time Director of Media (1)
University 3			1		1	3			1	4	
University 4	1		1							70	*All Full-time*: Director of Competition (1), Director of Production (1), Program Manager (1), Esports Coordinators (2), IT Specialist (1)
University 5			1			3					Full-time Arena Coordinator (1)
University 6										9	
University 7	1		1				2			2	
University 8										20	Full-time Administrators (5)
University 9					1					13	
University 10	1		1								
University 11	1					2				1	
University 12	1		1			3		2		5	
% that have that position: (*n*=12)	50.0%	0.0%	58.3%	0.0%	25.0%	41.7%	16.7%	8.3%	8.3%	83.3%	

Note. Data obtained from the esports director survey. Directors were instructed to also include their own position, if applicable.

Key:
1 = Not very competitive
2 = A little bit competitive (some local success)
3 = Very competitive (regional success & some national success)
4 = Top competitive program (consistent national success)

Institution	On a 4-point scale, RATE the Competitiveness of your overall Esports Program		
	Esports Directors *(n=12)*	Esports Staff *(n=14)*	Esports Players *(n=206)*
University 1	**3.0** *(n=1)*	**3.0** *(n=1)*	**2.5** (*n*=10; Range 2-3)
University 2	**4.0** *(n=1)*	**4.0** *(n=1)*	**4.0** (*n*=18; Range 4-4)
University 3	**4.0** *(n=1)*	n/a	**3.1** (*n*=19; Range 2-4)
University 4	**3.0** *(n=1)*	**3.0** *(n=3)*	**2.4** (*n*=25; Range 1-4)
University 5	**4.0** *(n=1)*	**4.0** *(n=2)*	**3.4** (*n*=14; Range 3-4)
University 6	**2.0** *(n=1)*	n/a	**2.3** (*n*=8; Range 1-3)
University 7	**3.0** *(n=1)*	**3.0** *(n=1)*	**2.8** (*n*=15; Range 2-4)
University 8	**2.0** *(n=1)*	n/a	n/a
University 9	**3.0** *(n=1)*	**2.7** *(n=3)*	**2.7** (*n*=19; Range 2-3)
University 10	**2.0** *(n=1)*	**3.0** *(n=2)*	**3.0** (*n*=58; Range 2-4)
University 11	**3.0** *(n=1)*	n/a	**2.3** (*n*=3; Range 2-3)
University 12	**3.0** *(n=1)*	**3.0** *(n=1)*	**3.1** (n=17; Range 2-4)
Entire Sample Average:	**3.0 *(n=12)***	**3.1 *(n=14)***	**3.0 *(n=206)***

Note. n/a = not applicable. Average scores are provided per category for each institution.

21

Table 9. VOICE-affiliated Institutions' Competitive Esports Program Game Titles Played (Institution Website Listings)

VOICE Institutions	Apex	Beat Saber	CoD	Chess	College Football	CS	Dota2	Fortnite	Guilty Gear	Halo	Hearthstone	LoL	Mario Kart	ML:BB	MK	NBA 2k	OW	R6	RL	Sim Racing	SSB	Smite	Splatoon	Street Fighter	TFT	TF2	Tekken	Tetris	Valorant	Total Titles
University 1	V	C				V & C	V					V					V	C	V						V & C	V & C			V & C	11 (9V)
University 2						C					C	V					V	C	V		V								V	8 (5V)
University 3	C		C							V		V			V		V	C	V		V								C	10 (6V)
University 4			V			V											V		V		V								V	6 (6V)
University 5												V					V												V	3 (3V)
University 6												V					V		V		V								V	5 (5V)
University 7	V											V	V				V	V	V		V			V					V	9 (9V)
University 8	C		C			C		C				C					C	C	C		C	C							C	11 (0V)
University 9			V			V						V					V	V	V		V								V	8 (8V)
University 10	V		V	V	V	V			V	V		V	V			V	V	V	V	V	V		V	V			V		V	19 (19V)
University 11												V					V		V		V							V	V	6 (6V)
University 12			V														V		V		V								V	5 (5V)
# of Programs that Play this Game:	5	1	6	1	1	6	1	1	1	2	1	10	1	1	1	1	12	7	11	1	10	1	1	2	1	1	1	1	12	
# of VARSITY Programs that Play this Game:	3	0	4	1	1	4	1	0	1	2	0	9	1	1	1	1	11	3	10	1	9	0	1	2	1	1	1	1	10	*81V+ 16C = 97 Teams*
# of CLUB Programs that Play this Game:	2	1	2	0	0	*3	0	1	0	0	1	1	0	0	0	0	1	4	1	0	1	1	0	0	*1	*1	0	0	*3	

Total Different Game Titles: 29

KEY: **V = Varsity** (i.e., institution/staff-driven; top team at that university that plays other universities; club-level teams may also exist in game title)
C = Club (i.e., student-driven; but still play other universities; not simply intramurals)

Note. Game title lists retrieved from each institution's esports program website, with final revisions made from feedback by the esports program directors. Some game titles have multiple versions that may be played (e.g., CoD, CS, SSB, etc.).

Key: Apex = *Apex Legends*; CoD = *Call of Duty*; LoL = *League of Legends*; ML:BB = *Mobile Legends: Bang Bang*; MK = *Mortal Kombat*; OW = *Overwatch*; R6 = *Rainbow Six: Siege*; RL = *Rocket League*; SSB = *Super Smash Bros.*; TFT = *Teamfight Tactics*; TF2 = *Team Fortress 2*.

Table 10. Director Survey-reported Esports Game Titles Organized by University to Play Against Other University Programs

Game	Univ. 1	Univ. 2	Univ. 3	Univ. 4	Univ. 5	Univ. 6	Univ. 7	Univ. 8	Univ. 9	Univ. 10	Univ. 11	Univ. 12	Total	% of Sample
Apex Legends	X						X			X			3	25.0
Beat Saber	X												1	8.3
Call of Duty (any)	X			X			X		X	X		X	6	50.0
Chess										X			1	8.3
College Football (any)	X		X							X			3	25.0
Counter-Strike (any)	X			X			X		X	X			5	41.7
Dota 2	X												1	8.3
Guilty Gear										X			1	8.3
Halo (any)			X							X			2	16.7
Hearthstone	X												1	8.3
League of Legends	X	X	X		X		X		X	X	X		8	66.7
Mario Kart	X									X			2	16.7
Mobile Legends: Bang Bang							X						1	8.3
Mortal Kombat										X			1	8.3
Overwatch (any)	X	X	X	X	X	X	X	X	X	X	X	X	12	100.0
Rainbow Six Siege	X						X	X	X	X			5	41.7
Rocket League	X	X	X	X		X		X	X	X	X	X	10	83.3
Sim Racing										X		X	2	16.7
Splatoon										X			1	8.3
Street Fighter (any)										X			1	8.3
Super Smash Bros. (any)	X	X	X	X		X	X	X	X	X	X	X	11	91.7
Teamfight Tactics	X					X							2	16.7
Team Fortress 2	X												1	8.3
Tekken (any)										X			1	8.3
Valorant	X	X	X	X	X		X		X	X	X	X	10	83.3
Total Games Played:	**16**	**5**	**7**	**6**	**3**	**4**	**9**	**4**	**8**	**19**	**5**	**6**	**92 teams**	

Note. Data obtained from esports director survey ($n = 12$). $m = 7.7$ average game titles per institution; Range: 3-19 game titles. 25 different game titles; some game titles have multiple versions that may be played (e.g., Call of Duty, Counter-Strike, Super Smash Bros., etc.).

Table 11. VOICE-affiliated Institution Collegiate Esports League and Circuit Participation

Game	Univ. 1	Univ. 2	Univ. 3	Univ. 4	Univ. 5	Univ. 6	Univ. 7	Univ. 8	Univ. 9	Univ. 10	Univ. 11	Univ. 12	Total	% of Sample Joined
Big Esports Conference						X					X		2	16.7
College Carball Association (Rocket League)									X	X		X	3	25.0
College League of Legends (CLoL)		X	X		X	X	X		X	X	X		8	66.7
College CoD (CCL; Call of Duty)									X	X		X	3	25.0
College XP Call of Duty												X	1	8.3
Collegiate Cephalopod Association (Splatoon 3)										X			1	8.3
Collegiate Conference Series (Rocket League)			X								X	X	3	25.0
Collegiate Esports Commissioner's Cup (CECC)					X	X	X				X	X	5	41.7
Collegiate Fighting Games Community (CFGC)										X			1	8.3
Collegiate iRacing League										X		X	2	16.7
Collegiate Mario Kart League	X									X			2	16.7
CollegiateR6 (Rainbow Six Siege)	X								X	X			3	25.0
Collegiate Rocket League (CRL)		X	X		X					X	X	X	6	50.0
Collegiate Valorant (CVAL)	X	X	X		X	X				X	X	X	8	66.7
Eastern College Athletic Conference (ECAC)												X	1	8.3
ECAC Esports												X	1	8.3
EGF Collegiate							X						1	8.3
Esports Collegiate Conference			X										1	8.3
FACEIT Collegiate							X		X				2	16.7
Midwest Esports Conference			X										1	8.3
MidwestR6 Collegiate League (Rainbow Six: Siege)									X				1	8.3
Mountain West Conference (MW)							X						1	8.3
NACE Varsity Plus	X				X			X				X	4	33.3
NACE Varsity Premier		X										X	2	16.7
National Esports Collegiate Conference (NECC)	X			X	X				X	X			5	41.7
Octane Collegiate (Apex Legends)							X			X			2	16.7
Overwatch Collegiate Championship Series		X	X		X	X	X			X	X	X	8	66.7
Power Esports Conference				X						X	X		3	25.0
Rainbow Six Collegiate							X			X			2	16.7
Southeastern Esports League	X												1	8.3
Total Leagues Played:	**6**	**5**	**7**	**2**	**6**	**6**	**8**	**1**	**7**	**15**	**8**	**13**	**84 league teams**	

Note. Data obtained from esports director survey ($n = 12$). $m = 7.0$ average esports leagues/circuits per institution; Range: 1-15 leagues/circuits. At least 84 league teams total; some institutions may field more than 1 team within the same league (i.e., Team A, Team B, etc.).

VOICE-affiliated Esports Directors' Demographics

Category	Count (n)	Percentage (%)
Age (years; *m* = 33.92; Range 25-45)		
20-29	5	41.7
30-39	4	33.3
40-49	3	25.0
Gender		
Female	0	0.00
Male	12	100.0
Race/Ethnicity		
Asian	1	8.3
Black or African American (Non-Hispanic)	0	0.00
Hispanic	0	0.00
Native Hawaiian or Other Pacific Islander	1	8.3
Two or More Races	2	16.7
White (Non-Hispanic)	8	66.7
Highest Esports Level Played, Coached, or Managed Previously		
None	4	33.3
Amateur	4	33.3
Semi-professional	2	16.7
Professional	2	16.7
# Years Experience in Collegiate Esports (*m* = 7.69; Range 1-12)		
< 1-4	2	16.7
5-9	6	50.0
10-14+	4	33.3
Current Esports Job Title		
Esports Director / Co-director / Coordinator	7	58.3
Head Esports Coach / Manager	3	25.0
Other	3	25.0
Current Esports Job Employment Status		
Full-time	11	91.7
Part-time	0	0.0
Volunteer	1	8.3
# Years in Current Esports Job (*m* = 4.87; Range 1-10)		
< 1-4	9	75.0
5-9	2	16.7
10-14+	1	8.3

Note. The esports director sample includes one director from each of the 12 VOICE-affiliated institutions. Data obtained from the director survey (*n* = 12).

VOICE-affiliated Esports Staff (Non-director) Demographics

Table 13. VOICE-affiliated Esports Staff (Non-director) Demographics

Category	Count (*n*)	Percentage (%)
Age (years; *m* = 30.21; Range 24-43)		
20-29	10	71.4
30-39	3	21.4
40-49	1	7.1
Gender		
Female	2	14.3
Male	12	85.7
Race		
Asian	3	21.4
Black or African American (Non-Hispanic)	0	0.0
Hispanic	1	7.1
Native Hawaiian or Other Pacific Islander	0	0.0
Two or More Races	1	7.1
White (Non-Hispanic)	9	64.3
Highest Esports Level Played		
None	0	0.0
Amateur	7	50.0
Semi-professional	4	28.6
Profession	3	21.4
# Years in Collegiate Esports (*m* = 6.57; Range 1-10)		
< 1-4	2	14.3
5-9	10	71.4
10-14+	2	14.3
University		
University 1	1	7.1
University 2	1	7.1
University 3	0	0.0
University 4	3	21.4
University 5	2	14.3
University 6	0	0.0
University 7	1	7.1
University 8	0	0.0
University 9	3	21.4
University 10	2	14.3
University 11	0	0.0
University 12	2	14.3

Category	Count (*n*)	Percentage (%)
Current Esports Job		
Esports Co-director / Coordinator / Manager	9	64.3
Esports Assistant Director	1	7.1
Esports Professor	2	14.3
Other	2	14.3
# Years in Current Esports Job (*m* = 2; Range <1-5)		
<1-4	12	85.7
5-9	2	14.3
10-14+	0	0.0
Employment Status		
Full-time	13	92.9
Part-time	0	0.0
Volunteer	1	7.1

Note. Data obtained from the esports staff (non-director) survey (*n* = 14).

VOICE-affiliated Esports Player Survey Demographics

Table 14. VOICE-affiliated Esports Player Survey Demographics

Category	Count (*n*)	Percentage (%)
Age (years; *n* = 238; *m* = 20.67; Range 18-33)		
18	26	10.9
19	53	22.3
20	57	24.0
21	44	18.50
22	23	9.7
23	13	5.5
≥ 24	16	2.5
Gender (*n* = 238)		
Female	20	8.4
Male	209	87.8
Non-binary	5	2.1
Transgender Man	1	0.4
Transgender Woman	3	1.3
Disability (*n* = 238)		
No	203	85.3
Yes	20	8.4
Prefer not to say	15	6.3
Race (*n* = 238)		
American Indian or Alaska Native	1	0.4
Asian	60	25.2
Black or African American (Non-Hispanic)	3	1.3
Hispanic	13	5.5
Native Hawaiian or Other Pacific Islander	1	0.4
Two or More Races	29	12.2
White (Non-Hispanic)	128	53.8
Other	3	1.3
Academic Status & *Grade Point Average* (avg. GPA = 3.38; *n* = 229)		
Freshman *(avg. GPA = 3.47; 2 Freshmen without GPAs)*	48	21.0
Sophomore *(avg. GPA = 3.16)*	63	27.5
Junior *(avg. GPA = 3.43)*	61	26.6
Senior *(avg. GPA = 3.46)*	47	20.5
Graduate Student *(avg. GPA = 3.81)*	10	4.4
Average Hours Gaming/Week during Academic Semester, including Esports Practices & Competitions (*n* = 210; *m* = 22.47; Range <1-84)		
≤5	10	4.8
6-10	40	19.1
11-15	36	17.1
16-20	42	20.0
≥ 21	82	39.1

Category	Count (*n*)	Percentage (%)
Years Playing Collegiate Esports (*n* = 210)		
This is my 1st academic year	88	41.9
This is my 2nd academic year	69	32.9
This is my 3rd academic year	29	13.8
This is my 4th academic year	20	9.5
This is my 5th academic year	4	1.9
***Esports Scholarship** (*n* = 219)		
Full	21	9.6
Partial/In-State Tuition Waiver	33	15.1
None	165	75.3
Type of Collegiate Esports Program Play Within (*n* = 210)		
Staff-driven / Institution-driven (*organized & managed by non-student staff hired by the university*)	141	67.1
University 2 (*n* = 17)		
University 3 (*n* = 19)		
University 4 (*n* = 14)		
University 5 (*n* = 13)		
University 6 (*n* = 2)		
University 7 (*n* = 8)		
University 9 (*n* = 16)		
University 10 (*n* = 37)		
University 12 (*n* = 15)		
Student-driven (*organized & managed by students*)	69	32.9
University 1 (*n* = 10)		
University 7 (*n* = 1)		
University 2 (*n* = 1)		
University 3 (*n* = 1)		
University 4 (*n* = 11)		
University 5 (*n* = 1)		
University 6 (*n* = 6)		
**University 7 (*n* = 12)		
University 9 (*n* = 3)		
University 10 (*n* = 19)		
University 11 (*n* = 3)		
University 12 (*n* = 2)		
Collegiate Esports Player Category (*n* = 210)		
***Varsity Esports* Player**: *I play for my university's TOP team against other university teams.*	156	73.3
***JV / Academy Esports* Player**: *I play for a developmental team against other university esports teams/players, but NOT for my university's top (varsity) team.*	32	15.2
Competitive Club Esports Player: *I play esports against people from other university teams recreationally.*	16	7.6
Casual Club Esports Player: *I only play esports against people from my own university.*	6	2.9

Note. Across this table, the number (*n*) of players which responded to each of the demographic questions fluctuated due to survey dropout (i.e., quitting early and not completing the entire survey). Data obtained from the player survey.

* = data from the esports directors revealed that University 12 was the only program with graduate assistantships for players (n = 1); esports graduate assistantships may be given to non-players (e.g., assistant directors, managers, etc.), as seen in Table 7 above.

** = includes 1 player from [redacted] and 1 player from [redacted] which are both students at branch campuses under the purview of University 7's esports program.

Table 15. Esports Player Survey Primary Game Title Played and University Affiliation

Game	Univ. 1	Univ. 2	Univ. 3	Univ. 4	Univ. 5	Univ. 6	Univ. 7	Univ. 8	Univ. 9	Univ. 10	Univ. 11	# of Players Per Game	% of Players Per Game
Apex Legends									5			5	2.4%
Beat Saber	4											4	1.9%
Call of Duty (any)				2				1	3		3	9	4.3%
Chess									2			2	1.0%
Counter-Strike (any)				2			2		6			10	4.8%
Omega Strikers						1						1	0.5%
Halo (any)									3			3	1.4%
League of Legends	4	7	2	8	5		2	1	2			31	14.8%
Mario Kart	2								2			4	1.9%
Mobile Legends: Bang Bang							1					1	0.5%
NBA2k			1									1	0.5%
Overwatch (any)		2	3	3	7	5	7	4	4	1	5	41	19.5%
Rainbow Six Siege								1	8			9	4.3%
Rocket League		3	2	1				3	4		2	15	7.1%
SimRacing									3			3	1.4%
Splatoon									4			4	1.9%
Street Fighter (any)			3									3	1.4%
Super Smash Bros. (any)			8	2			6	4	4		2	26	12.4%
Teamfight Tactics						1						1	0.5%
Tekken			1									1	0.5%
Valorant		6	1	6	2	1	2	5	6	2	4	35	16.7%
Other (not specified)											1	1	0.5%
Total:	10	18	20	25	14	8	20	19	56	3	17	(n = 210)	
% of Player Survey Sample:	4.8%	8.6%	9.5%	11.9%	6.7%	3.8%	9.5%	9.0%	26.7%	1.4%	8.1%		

Note. This table displays the number of esports players from each VOICE-affiliated university who completed the player survey at least up until the university affiliation question (n = 210). There were no player survey responses from University 8. University 7's data includes 1 player from [redacted] and 1 player from [redacted] which are both students at branch campuses under the purview of University 7's esports program director. Player survey statistics: m = 19.1 average number of players who took the player survey per institution (n=11 institutions); Range: 3-56 players. 21 different game titles represented from player survey; some game titles have multiple versions that may be played (e.g., Call of Duty, Counter-Strike, Super Smash Bros., etc.); m = 10.0 average number of players per game; Range: 1-41.

VOICE-affiliated Varsity Esports Player Spreadsheet Roster Data

Table 16. VOICE-affiliated Varsity Esports Player Spreadsheet Roster Data (provided by Esports Directors)

Gender (*n* = 538)	Total	Percent
Female	37	6.9
Male	491	91.3
Non-binary	7	1.3
Transgender	3	0.6
Academic Status (*n* = 598)		
Freshman	103	17.2
Sophomore	164	27.4
Junior	171	28.6
Senior	121	20.2
Graduate Student	39	6.5
GPA (*n* = 476)		
3.5-4.0	211	44.3
3.0-3.49	135	28.4
2.5-2.99	80	16.8
2.0-2.49	32	6.7
≤2.49	18	3.8
Player Recruited for Esports (*n* = 598)		
Yes	460	76.9
No	138	23.1
Esports Scholarship (*n* = 598)		
Full	29	4.8
Partial	69	11.5
Graduate Assistantship	2	0.3
None	498	83.3
Out-of-State (*n* = 538)		
Yes	210	39.0
No	328	61.0
International Student (*n* = 538)		
Yes	43	8.0
No	495	92.0

Note. Not all categories' data were obtained by each director. Only 35 of 50 varsity esports player roster data were provided by University 11. University 10 also provided additional data for non-player "Community and Labs" (*n* = 10; 5 out-of-state; all paid students), "Creative Content: News Team" (*n* = 10; 4 out-of-state), "Creative Content: Media Team" (*n* = 14; 5 out-of-state; 1 international), "Creative Content: Production Team" (*n* = 16; 1 out-of-state), "Admin/Leadership" (*n* = 6; 2 out-of-state; 3 paid students including 2 graduate assistants) which were all not included in this table or any of the analyses due to these people not being collegiate esports players; cumulative demographics (*n*=56): 21% freshmen (*n*=12), 29% sophomores (*n*=16), 25% juniors (*n*=14), 20% seniors (*n*=11), 5% graduate students (*n*=3); 20% female (*n*=11), 80% male (*n*=45); average GPA 3.34 (*n*=55; GPA not available for 1). Similarly, University 3 provided demographics on 21 additional non-player members of their esports program, which was not included in the analyses. Their demographics include: "Broadcasting" (*n*=8), "Graphic Design" (*n*=5), "Media Production" (*n*=1), "Program Intern" (*n*=5), "Project Manager" (*n*=1), "Social Media" (*n*=1); 29% freshmen (*n*=6), 19% sophomores (*n*=4), 24% juniors (*n*=5), 5% seniors (*n*=1), 24% graduate students (*n*=5); 29% female (*n*=6), 71% male (*n*=15); 33% out-of-state (*n*=7), 5% international (*n*=1); average GPA 3.55 (*n*=16; GPA not available for 5 students).

Game	Univ. 1	Univ. 2	Univ. 3	Univ. 4	Univ. 5	Univ. 6	Univ. 7	Univ. 8	Univ. 9	Univ. 10	Univ. 11	# of Varsity Players Per Game	% of Varsity Players Per Game
Apex Legends	2	0	0	0	0	0	6	0	4	0	0	**12**	**2.0%**
Beat Saber	6	0	0	0	0	0	0	0	0	0	0	**6**	**1.0%**
Call of Duty (any)	0	0	0	5	0	0	0	8	6	0	11	**30**	**5.0%**
Chess	0	0	0	0	0	0	0	0	6	0	0	**7**	**1.2%**
College Football 25	0	0	1	0	0	0	0	0	0	0	0	**1**	**0.2%**
Counter Strike (any)	10	0	0	5	0	0	7	5	8	0	0	**35**	**5.9%**
Fighting Games Community (undefined)	2	0	0	0	0	6	0	0	6	0	0	**14**	**2.3%**
Halo (any)	0	0	4	0	0	0	0	0	7	0	0	**11**	**1.8%**
iRacing	0	0	0	0	0	0	0	0	0	0	1	**1**	**0.2%**
Koruto	1	0	0	0	0	0	0	0	0	0	0	**1**	**0.2%**
League of Legends	8	8	11	0	16	14	9	8	8	8	0	**90**	**15.1%**
Major League Baseball	3	0	0	0	0	0	0	0	10	0	0	**13**	**2.2%**
Mario Kart	0	0	0	0	0	0	4	0	0	0	0	**4**	**0.7%**
Omega Strikers	0	0	0	0	0	4	0	0	0	0	0	**4**	**0.7%**
Overwatch (any)	14	7	10	7	0	15	7	12	8	14	10	**104**	**17.4%**
Rainbow Six Siege	8	0	0	0	0	0	8	12	8	0	0	**36**	**6.0%**
Rocket League	0	6	7	3	0	9	0	10	5	2	9	**51**	**8.5%**
SimRacing	0	0	0	0	0	0	0	0	0	0	0	**0**	**0.0%**
Splatoon	0	0	3	0	0	0	0	0	0	0	0	**3**	**0.5%**
Sports (undefined)	0	0	0	0	0	0	0	0	6	0	0	**6**	**1.0%**
Street Fighter 6	0	0	0	0	0	0	0	0	1	0	0	**1**	**0.2%**
Super Smash Bros. (any)	0	1	11	8	0	5	13	10	8	1	10	**67**	**11.2%**
Tetris	0	0	0	0	0	0	0	0	0	1	0	**1**	**0.2%**
Valorant	4	8	9	7	7	7	17	16	6	9	10	**100**	**16.7%**
Total:	**59**	**30**	**56**	**35**	**23**	**60**	**71**	**81**	**97**	**35**	**51**	***(n* = 598)**	
% of Varsity Rosters for Sample:	**9.9%**	**5.0%**	**9.4%**	**5.9%**	**3.8%**	**10.0%**	**11.9%**	**13.5%**	**16.2%**	**5.9%**	**8.5%**		

Note. Data provided by esports directors via the varsity player spreadsheets (*n* = 598). No varsity player spreadsheet was provided by University 8. The average roster size was 54.4 players (n = 11 institutions).

Results

Diversity and Inclusion: Gender

Research Question:

- **Is there a difference between the <u>gender</u> composition of VOICE-affiliated collegiate esports players compared to the total student body?**

Method: A chi-square test of independence was conducted for each institution to compare the gender distribution of varsity esports players to the general student body.

Results: Yes; as seen in Table 18, the collegiate esports programs demonstrated universal male dominance compared to the gender composition of the total student bodies.

1. All 10 institutions with available data showed significant gender disparities ($p < 0.001$), with esports teams being 81–100% male. In other words, all of these esports programs demonstrated statistically significant underrepresentation of females compared to females within the respective general student bodies.

2. Most Extreme Cases:

    - **University 2**: 100% male esports vs. 72.2% female general student body ($\chi^2 = 77.9$, $p < 0.001$).

    - **University 10**: 98.9% male esports vs. 52.4% female general student body ($\chi^2 = 79.4$, $p < 0.001$).

3. Only 3 of 10 institutions had more than 10% female participation in varsity esports.

4. No institution had more than 19% female participation in varsity esports.

Table 18. Gender of Student Body and Varsity Esports Players

Institution	Year of Gender Data	Gender of Student Body			Gender of Esports Players (Varsity Player Spreadsheets)			
		Male (%)	Female (%)	Non-binary (%)	Male (%)	Female (%)	Transgender (%)	Non-binary (%)
University 1	2023	67.4% (n=32,325)	32.6% (n=15,621)	n/a	98.3% (n=58)	0.0% (n = 0)	0.0% (n = 0)	1.7% (n = 1)
University 2	2024	27.8% (n=2,575)	72.2% (n=6,686)	n/a	100% (n=30)	0.0% (n = 0)	0.0% (n = 0)	0.0% (n = 0)
University 3	2024	45.7% (n=10,283)	54.3% (n=12,225)	n/a	92.8% (n=52)	3.6% (n = 2)	1.8% (n = 1)	1.8% (n = 1)
University 4	2023-2024	45.0% (n=10,317)	55.0% (n=12,629)	n/a	91.4% (n=32)	2.9% (n = 1)	0.0% (n = 0)	5.7% (n = 2)
University 5	2023-2024	46.1% (n=15,529)	52.4% (n=17,665)	1.5% (n=496)	95.7% (n=22)	4.3% (n = 1)	0.0% (n = 0)	0.0% (n = 0)
University 6	2024	~41.4% (n=19,303)	~56.6% (n=26,431)	~1.4% (n=656)	n/a	n/a	n/a	n/a
University 7	2023	31% (n=~5,969)	59% (n=~11,361)	n/a	81.7 (n=58)	18.3% (n=13)	0.0% (n = 0)	0.0% (n = 0)
University 8	2023-2024	~40.8% (n=13,809)	~59.1% (n=19,969)	n/a	n/a	n/a	n/a	n/a
University 9	2024	50.7% (n=7,616)	49.2% (n=7,393)	n/a	85.2 (n=69)	13.6% (n = 11)	0.0% (n = 0)	1.2% (n = 1)
University 10	2023-2024	~47.5% (n=13,435)	~52.4% (n=14,816)	n/a	98.9 (n=93)	4.1% (n = 4)	0.0% (n = 0)	0.0% (n = 0)
University 11	2024	~46.5% (n=21,936)	~52.8% (n=24,885)	~0.6% (n=328)	85.7 (n=30)	8.6% (*n = 3*)	0.0% (n = 0)	5.7% (n = 2)
University 12	2024	41.5% (n=7,346)	58.5% (n=10,354)	n/a	92.2 (n=47)	3.9% (n = 2)	3.9% (n = 2)	0.0% (n = 0)

Note. n/a = not available; ~ = numbers are approximate due to calculations based on percentages of undergraduate and graduate student data (i.e., percentages not provided on the entire student body). All institutional data was collected from each institution's Institutional Research Office website (or equivalent institution posted "facts" reports). In some cases, gender percentages were calculated based on student numbers provided when only numbers were presented, which did not always equate to the total number of students listed. No institution tracked transgender student data and only two institutions tracked non-binary student data. Esports player gender data were obtained from the varsity player spreadsheets completed by the program directors.

Diversity and Inclusion: Race/Ethnicity

Research Question:
- **Is there a difference between the <u>race/ethnicity</u> composition of VOICE-affiliated collegiate esports players compared to the total student body?**

Method: A chi-square goodness-of-fit test was conducted for each institution to compare the racial/ethnic distribution of esports players ($n = 227$) to the general student body.

Results: As seen in Table 19 and outlined below, 5 of the 11 VOICE-affiliated esports programs demonstrated statistically significant overrepresentation of Asian students compared to their respective student bodies. In other words, these five programs had significantly more Asian esports players compared to the student body.

Moreover, 2 of 11 programs also exhibited significant overrepresentation of students of 2 or more races. Put differently, these two programs had significantly more players of two or more races compared to the same institutions' student bodies.

Finally, 2 of 11 esports programs showed significant underrepresentation of Black students. Thus, these programs had significantly less Black esports players compared to the student body.

Please note that the chi-square tests for some institutions may be underpowered to detect true population differences due to limited sample sizes (e.g., Asian players for *University 10* and *University 12*, players of 2 or more races for *University 6*, etc.).

- **Asian Students are Significantly Overrepresented in Esports**:

  - **University 1** (70% vs. 25.4%; $\chi^2 = 9.41$, $p = 0.002$)
  - **University 2** (21.1% vs. 3.6%; $\chi^2 = 6.37$, $p = 0.012$)
  - **University 4** (32.3% vs. 6.2%; $\chi^2 = 7.85$, $p = 0.005$)
  - **University 5** (50% vs. 35%; $\chi^2 = 4.98$, $p = 0.026$)
  - **University 7** (50% vs. 30.5%; $\chi^2 = 8.21$, $p = 0.004$)

- **Students of Two or More Races are Significantly Overrepresented in Esports**:

  - **University 3** (19% vs 3.7%; $\chi^2 = 5.87$, $p = 0.015$)
  - **University 7** (31.8% vs. 24%; $\chi^2 = 5.03$, $p = 0.025$)

- **Black Students are Significantly Underrepresented in Esports**:

  - **University 1** (0% vs. 5.5%; $\chi^2 = 4.12$, $p = 0.042$)
  - **University 2** (0% vs. 14.3%; $\chi^2 = 5.89$, $p = 0.015$)

Table 19. Race/Ethnicity of Student Body and Esports Players

Institution	Student Body or Esports Players	Race/Ethnicity								
		American Indian/ Alaska Native	Asian	Black	Hispanic	Native Hawaiian/ Pacific Islander	Non-resident alien	Two or more races	Unknown	White (Non-Hispanic)
University 1	**Student Body**	**0.1%** (n=48)	**25.4%** (n=12,178)	**5.5%** (n=2,637)	**6.6%** (n=3,164)	**0.1%** (n=48)	**26.4%** (n=12,658)	**3.4%** (n=1,630)	**1.3%** (n=623)	**31.3%** (n=15,007)
	Esports (n=10)	0% (n=0)	70.0% (n=7)*	0% (n=0)*	0% (n=0)	0% (n=0)	n/a	0% (n=0)	0% (n=0)	30.0% (n=3)
University 2	**Student Body**	**0.6%** (n=56)	**3.6%** (n=333)	**14.3%** (n=1,324)	**7.8%** (n=722)	**0.0%** (n=0)	**2.8%** (n=259)	**3.3%** (n=306)	**3.6%** (n=333)	**64.1%** (n=14,448)
	Esports (n=19)	0% (n=0)	21.1% (n=4)*	0% (n=0)*	10.5% (n=2)	0% (n=0)	n/a	0% (n=0)	0% (n=0)	68.4% (n=13)
University 3	**Student Body**	**0.2%** (n=45)	**2.7%** (n=608)	**3.2%** (n=720)	**4.7%** (n=1,057)	**0.0%** (n=0)	**4.8%** (n=1,080)	**3.7%** (n=833)	**1.1%** (n=248)	**79.7%** (n=17,939)
	Esports (n=21)	0% (n=0)	0% (n=0)	4.8% (n=1)	0% (n=0)	0% (n=0)	n/a	19.0% (n=4)*	0% (n=0)	76.2% (n=16)
University 4	**Student Body**	**0.4%** (n=92)	**6.2%** (n=1,423)	**7.6%** (n=1,744)	**10.0%** (n=2,295)	**0.1%** (n=23)	**18.1%** (n=4,154)	**3.8%** (n=872)	**2.1%** (n=482)	**51.5%** (n=11,818)
	Esports (n=31)	0% (n=0)	32.3% (n=10)*	3.2% (n=1)	6.5% (n=2)	0% (n=0)	n/a	3.2% (n=1)	0% (n=0)	54.8% (n=17)
University 5	**Student Body**	**0.1%** (n=34)	**35.0%** (n=11,860)	**2.2%** (n=745)	**24.0%** (n=8,133)	**0.1%** (n=34)	**15.6%** (n=5,286)	**6.0%** (n=2,033)	**2.0%** (n=678)	**15.1%** (n=5,117)
	Esports (n=14)	0% (n=0)	50.0% (n=7)*	0% (n=0)	0% (n=0)	0% (n=0)	n/a	28.6% (n=4)	0% (n=0)	21.4% (n=3)
University 6	**Student Body**	**0.2%** (n=93)	**26.6%** (n=12,416)	**3.6%** (n=1,680)	**20.7%** (n=9,662)	**0.2%** (n=93)	**13.6%** (n=6,348)	**6.6%** (n=3,081)	**2.8%** (n=1,307)	**25.7%** (n=11,996)
	Esports (n=10)	0% (n=0)	20.0% (n=2)	0% (n=0)	10.0% (n=1)	0% (n=0)	n/a	30.0% (n=3)	0% (n=0)	40.0% (n=4)
University 7	**Student Body**	**0.2%** (n=39)	**30.5%** (n=5,873)	**1.4%** (n=270)	**12.5%** (n=2,407)	**3.0%** (n=58)	**6.2%** (n=1,194)	**24.0%** (n=4,621)	**0.7%** (n=135)	**21.6%** (n=4,159)
	Esports (n=22)	0% (n=0)	50.0% (n=11)*	0% (n=0)	0% (n=0)	4.5% (n=1)	n/a	31.8% (n=7)*	0% (n=0)	13.6% (n=3)
University 8	**Student Body**	**0.2%** (n=68)	**3.8%** (n=1,287)	**7.0%** (n=2,372)	**5.9%** (n=1,999)	**0.1%** (n=34)	**3.5%** (n=1,186)	**3.7%** (n=1,254)	**1.7%** (n=576)	**74.0%** (n=25,075)
	Esports (n=0)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
University 9	**Student Body**	**~1.0%** (n=150)	**~3.0%** (n=451)	**~3.0%** (n=451)	**~5.0%** (n=751)	**~0.0%** (n=0)	**~6.0%** (n=901)	**~4.0%** (n=601)	**~2.0%** (n=300)	**~75.0%** (n=11,264)
	Esports (n=20)	0% (n=0)	5.0% (n=1)	0% (n=0)	5.0% (n=1)	0% (n=0)	n/a	5.0% (n=1)	0% (n=0)	85.0% (n=17)
University 10	**Student Body**	**~4.0%** (n=1,131)	**~6.0%** (n=1,696)	**~5.0%** (n=1,413)	**~13.0%** (n=3,674)	**~0.0%** (n=0)	**~6.0%** (n=1,696)	**~9.0%** (n=2,544)	**~2.0%** (n=565)	**~55.0%** (n=15,545)
	Esports (n=58)	0% (n=0)	17.2% (n=10)	1.7% (n=1)	10.3% (n=6)	0% (n=0)	n/a	8.6% (n=5)	0% (n=0)	62.1% (n=36)
University 11	**Student Body**	**0.2%** (n=94)	**19.9%** (n=9,382)	**6.1%** (n=2,876)	**15.9%** (n=7,496)	**0.2%** (n=94)	**27.1%** (n=12,777)	**4.2%** (n=1,980)	**3.3%** (n=1,556)	**23.3%** (n=10,985)
	Esports (n=3)	0% (n=0)	66.7% (n=2)	0% (n=0)	0% (n=0)	0% (n=0)	n/a	0% (n=0)	0% (n=0)	33.3% (n=1)
University 12	**Student Body**	**0.6%** (n=106)	**6.1%** (n=1,080)	**5.3%** (n=938)	**13.4%** (n=2,372)	**0.1%** (n=18)	**19.6%** (n=3,469)	**4.3%** (n=761)	**2.0%** (n=354)	**48.7%** (n=8,620)
	Esports (n=19)	0% (n=0)	15.8% (n=3)	0% (n=0)	10.5% (n=2)	0% (n=0)	n/a	5.3% (n=1)	0% (n=0)	68.4% (n=13)

Note. * = $p < .05$; *n/a* = not available. Institution race/ethnicity percentages were retrieved from the National Center for Education Statistics (NCES; https://nces.ed.gov); Fall 2023 data was the most recent available. University 9 and University 10 race/ethnicity data did not include decimals for the percentages;

thus, these are not precise as indicated with the estimate (~) sign. Number (n) estimates were calculated based on the NCES percentages and the total number of students listed in Table 3. Esports player race/ethnicity data obtained from the player survey as this data was not collected within the varsity player spreadsheet (*n* = 227).

Diversity and Inclusion *(and Student Recruitment)*: International Students

Research Question:
- **Is there a difference between the proportion of <u>international students</u> within VOICE-affiliated competitive collegiate esports programs compared to the total student body?**

Method: A two-proportion *z*-test was conducted for each institution to compare the percentage of international students in the varsity esports program player (*n* = 538) rosters versus the general student body.

Results: As seen in Table 20, two programs demonstrate significant underrepresentation while two programs revealed significant overrepresentation within the varsity esports program compared to the student body. This metric also relates to student recruitment.

1. **Significant Underrepresentation**:
   - **University 1**: International students comprised 5.1% of esports players (*n*=3) vs. 26.4% of the student body. This disparity was highly significant ($z = -2.12$, $p = 0.034$).
   - **University 10**: 1.0% of esports players were international (*n*=1) vs. ~6% of students ($z = -1.98$, $p = 0.048$).
2. **Significant Overrepresentation**:
   - **University 2**: 36.7% of esports players were international (*n*=11) vs. 2.7% of the student body ($z = 4.87$, $p < 0.001$).
   - **University 4**: 17.1% of esports players were international (*n*=6) vs. ~7.8% of students ($z = 2.01$, $p = 0.044$).
3. **No Significant Differences** ($p > 0.05$):
   - *University 3, University 5, University 6, University 7, University 9, University 11*, and *University 12* showed no statistically meaningful differences in international student participation.

Table 20. International Students in Student Body and Varsity Esports Program

Institution	Year of Data	Total Student Body Percentage of International Students	Varsity Esports Program Percentage of International Students
University 1	**2023**	**26.4%** *(n=12,665)*	**5.1%** *(n=3)**
University 2	**2024**	**2.7%** *(n=247)*	**36.7%** *(n=11)**
University 3	**2024**	**~3.8%** *(n=851)*	**3.6%** *(n=2)*
University 4	**2023-2024**	**~7.8%** *(n=1,784)*	**17.1%** *(n=6)**
University 5	**2023-2024**	**~10.8%** *(n=3,646)*	**13.0%** *(n=3)*
University 6	**2024**	**~19.2%** *(n=6,347)*	*n/a*
University 7	**2023**	**6.0%** *(n=~1,155)*	**4.2%** *(n=3)*
University 8	**2023-2024**	**3.8%** *(n=1,349)*	*n/a*
University 9	**2024**	**6.1%** *(n=915)*	**6.2%** *(n=5)*
University 10	**2023-2024**	**6.0%** *(n=1,704)*	**1.0%** *(n=1)**
University 11	**2024**	**~26.3%** *(n=12,374)*	**25.7%** *(n=9)*
University 12	**2024**	**16.1%** *(n=2,843)*	**0%** *(n=0)*

Note. * = p < .05; n/a = not available. International student data was collected from each institution's Institutional Research Office website (or equivalent institution posted "facts" reports). When not explicitly listed, percentages (%) or numbers (n) were calculated based on total number of students listed in Table 3, indicated by the estimate sign (~). Esports player data obtained from esports directors via the varsity player spreadsheets *(n = 538)*.

Diversity and Inclusion: Disability

Research Question:
- **Is there a difference between the proportion of <u>students with a disability or long-term health condition</u> within VOICE competitive collegiate esports programs compared to the total student body?**

Method: A two-proportion *z*-test was conducted for each institution to compare the percentage of students with disabilities in each esports program as self-reported within the player survey versus the general student body. Only institutions with available disability data for the total student body were included.

Results: As seen in Table 21, one program had statistically significantly more students with disabilities in the esports program compared to the general student body. The only other two programs where general student disability data could be acquired show no significant difference. Overall, out of the player survey sample (n = 229), 8.4% (n = 20) of esports players self-reported a disability while 6.3% (n = 15) preferred not to say. For those that disclosed the disability, the most prevalent were Attention-Deficit/Hyperactivity Disorder (ADHD; n = 5; 2.2%) and autism (n = 3; 1.3%).

1. **Significant Overrepresentation**:
    - **University 9**: Students with disabilities comprised 20.0% of esports players vs. 4.27% of the general student body. This disparity was highly significant (z = 3.12, p = 0.002).

2. **No Significant Differences** ($p > 0.05$):
    - *University 1* and *University 3* showed no statistically meaningful gaps in student with disabilities.

Table 21. Percentage of Student Body and Esports Players with a Disability or Long-term Health Condition

Institution	Percentage of Students with a Disability (Fall 2024)	Esports Players Self-Reporting a Disability		
		Yes	**No**	**Prefer Not to Say**
University 1	**6.26%** *(n=3,000)*	**0.0%** *(n=0)*	**90.0%** *(n=9)*	**10.0%** *(n=1)*
University 2	*n/a*	**5.3%** *(n=1)*	**94.7%** *(n=18)*	**0.0%** *(n=0)*
University 3	**~13.71%** *(n=3,085)*	**9.5%** *(n=2)*	**81.0%** *(n=17)*	**9.5%** *(n=2)*
University 4	*n/a*	**6.5%** *(n=2)*	**87.1%** *(n=27)*	**6.5%** *(n=2)*
University 5	*n/a*	**7.1%** *(n=1)*	**92.9%** *(n=13)*	**0.0%** *(n=0)*
University 6	*n/a*	**0.0%** *(n=0)*	**100.0%** *(n=10)*	**0.0%** *(n=0)*
University 7	*n/a*	**12.5%** *(n=3)*	**87.5%** *(n=21)*	**0.0%** *(n=0)*
University 8	*n/a*	*n/a*	*n/a*	*n/a*
University 9	**~4.27%** *(n=642)*	**20.0%** *(n=4)**	**70.0%** *(n=14)*	**10.0%** *(n=2)*
University 10	*n/a*	**6.9%** *(n=4)*	**84.5%** *(n=49)*	**8.6%** *(n=5)*
University 11	*n/a*	**33.3%** *(n=1)*	**66.7%** *(n=2)*	**0.0%** *(n=0)*
University 12	*n/a*	**10.5%** *(n=2)*	**84.2%** *(n=16)*	**5.3%** *(n=1)*
	Total:	**8.7%** *(n=20)*	**85.6%** *(n=196)*	**5.7%** *(n=13)*

Note. * = $p < 0.001$; *n/a* = not available. ~ = percentages calculated based on total number of students listed in Table 3. Institution disability data was accessed through personal correspondence through individual institution's office of disability services. Player disability data obtained from the player survey *(n = 229)*.

Extracurricular Activity: Exposure to New Extracurricular Activity

Research Question:
- **What percentage of VOICE-affiliated competitive collegiate esports players did <u>NOT</u> participate in any <u>high school</u> (i.e., secondary-level school-sponsored) <u>extracurricular activity</u>?**

Results: As shown in Table 22, about 10% of VOICE-affiliated collegiate esports players did not participate in any extracurricular activity in high school. Only 47% of the sample played any traditional sport in high school, while almost 30% played high school esports. Over 64% partook in some form of high school extracurricular club and almost 59% were involved in the performing arts (e.g., band, choir, theater, orchestra).

Table 22. Self-reported Extracurricular Activities Performed in High School by Collegiate Esports Players

Institution	Extracurricular Activities Reported by Esports Players							Sample Total
	Traditional Sports	Esports	Band/Choir/Theater	Clubs	Student Gov	Yearbook	None	
University 1	20% (*n*=2)	0% (*n*=0)	30% (*n*=3)	80% (*n*=8)	0% (*n*=0)	0% (*n*=0)	10% (*n*=1)	10
University 2	47% (*n*=9)	11% (*n*=2)	11% (*n*=2)	63% (*n*=12)	0% (*n*=0)	5% (*n*=1)	21% (*n*=4)	19
University 3	62% (*n*=13)	24% (*n*=5)	100% (*n*=21)	38% (*n*=8)	14% (*n*=3)	0% (*n*=0)	5% (*n*=1)	21
University 4	45% (*n*=14)	3% (*n*=5)	58% (*n*=18)	32% (*n*=10)	6% (*n*=2)	3% (*n*=1)	13% (*n*=4)	31
University 5	64% (*n*=9)	16% (*n*=5)	71% (*n*=10)	36% (*n*=5)	7% (*n*=1)	0% (*n*=0)	7% (*n*=1)	14
University 6	70% (*n*=7)	20% (*n*=2)	100% (*n*=10)	20% (*n*=2)	10% (*n*=1)	0% (*n*=0)	10% (*n*=1)	10
University 7	33% (*n*=8)	25% (*n*=6)	67% (*n*=16)	25% (*n*=6)	4% (*n*=1)	0% (*n*=0)	25% (*n*=6)	24
University 8	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
University 9	45% (*n*=9)	60% (*n*=12)	65% (*n*=13)	100% (*n*=20)	20% (*n*=4)	0% (*n*=0)	10% (*n*=2)	20
University 10	45% (*n*=26)	33% (*n*=19)	57% (*n*=34)	95% (*n*=55)	7% (*n*=4)	7% (*n*=4)	5% (*n*=3)	58
University 11	67% (*n*=2)	0% (*n*=0)	33% (*n*=1)	100% (*n*=3)	33% (*n*=1)	0% (*n*=0)	0% (*n*=0)	3
University 12	47% (*n*=9)	63% (*n*=12)	37% (*n*=7)	95% (*n*=18)	0% (*n*=0)	5% (*n*=1)	0% (*n*=0)	19
Total:	**47.2%** (*n*=108)	**29.7%** (*n*=68)	**58.9%** (*n*=135)	**64.2%** (*n*=147)	**7.4%** (*n*=17)	**3.1%** (*n*=7)	**10.0%** (*n*=23)	**229**

Note. n/a = not available. Data obtained from player survey only (*n* = 229). Since players can select multiple options, the total percentages may exceed 100%.

Academics: Grade Point Average (GPA) of Esports Players

Research Question:
- **What is the <u>average GPA</u> of VOICE collegiate esports players?**

Results: Table 23 shows the average grade point average (GPA) of the VOICE-affiliated esports players, which were collected by two different methods. The results of the self-report player (*n* = 227) survey reveal an average GPA of 3.38 (Table 14). The more comprehensive varsity esports player roster spreadsheet (*n* = 477) indicated an average player GPA of 3.26 as reported by the program directors. Table 23 offers merged data that encompasses the varsity player spreadsheet GPA data from the program directors, while also including the player self-report data from University 4 and University 6 as those programs do not track varsity player GPA. Findings of the merged data reveal the average GPA of VOICE-affiliated esports players as being 3.27 (range: 0.0 to 4.0; *n* = 516). Over 13% have a 4.0 GPA, with less than 4% having less than a 2.0 GPA.

Table 23. Grade Point Average (GPA) of Esports Players by University

University	Average GPA (Range)	<2.0	2.0–2.99	3.0–3.99	4.0	Sample Total
University 1	**3.65** (2.19–4.00)		**6.8%** *(n=4)*	**62.7%** *(n=37)*	**30.5%** *(n=18)*	59
University 2	**3.65** (2.50–4.00)		**7.7%** *(n=2)*	**69.2%** *(n=18)*	**20.7%** *(n=6)*	26
University 3	**3.17** (2.04–3.98)		**35.2%** *(n=19)*	**64.8%** *(n=35)*		54
*University 4	**3.40** (1.90–4.00)	**3.4%** *(n=1)*	**3.4%** *(n=1)*	**86.2%** *(n=25)*	**6.9%** *(n=2)*	*29
University 5	**3.37** (2.47–4.00)		**18.2%** *(n=4)*	**77.3%** *(n=17)*	**4.5%** *(n=1)*	22
*University 6	**3.49** (3.00–3.90)			**100.0%** *(n=10)*		*10
University 7	**3.12** (1.80–4.00)	**1.4%** *(n=1)*	**38.0%** *(n=27)*	**54.9%** *(n=39)*	**5.6%** *(n=4)*	71
University 8	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*
University 9	**2.88** (**0.00–4.00)	**13.6%** *(n=11)*	**28.4%** *(n=23)*	**51.9%** *(n=42)*	**6.2%** *(n=5)*	81
University 10	**3.32** (0.67–4.00)	**5.3%** *(n=5)*	**17.0%** *(n=17)*	**46.3%** *(n=44)*	**30.5%** *(n=29)*	95
University 11	**3.58** (2.80–4.00)		**11.5%** *(n=3)*	**80.8%** *(n=21)*	**7.7%** *(n=2)*	26
University 12	**3.18** (1.15–4.00)	**2.3%** *(n=1)*	**30.2%** *(n=13)*	**62.8%** *(n=27)*	**4.7%** *(n=2)*	43
Total:	**3.27** (0.00–4.00)	**3.7%** *(n=19)*	**21.9%** *(n=113)*	**61.0%** *(n=315)*	**13.4%** *(n=69)*	**516**

Note. Esports GPA obtained from program directors via the varsity player spreadsheets except for University 4 and University 6 which does not collect that data. *Those two schools had their GPA calculated from the self-reported player survey, not including 2 Freshmen from University 4 who did not have a GPA yet. **University 9 includes data from 3 freshmen who were listed with 0.00 GPAs, and it is not certain whether this is valid (i.e., whether they do not have GPAs yet, or they earned all F's the first term).

Academics: GPA of Student Body vs. GPA of Esports Players

Research Question:
- **Is the <u>average GPA</u> of VOICE collegiate esports players <u>significantly different</u> than the <u>average GPA</u> of the total student body?**

Method: A one-sample z-test was conducted to compare the average GPA of varsity esports players at University 1 (n = 59) against the mean undergraduate GPA of University 1's undergraduate student body (n = 20,592).

Results: As seen in Table 24, the analysis revealed no statistically significant difference between the mean GPA of esports players (M = 3.65) and the undergraduate student body (M = 3.57) at University 1 (z = 1.75, p = 0.080).

Academics: GPA of Traditional Sport Athletes vs. GPA of Esports Players

Research Question:
- **Is the <u>average GPA</u> of VOICE collegiate esports players <u>greater</u> than the <u>average GPA</u> of traditional sport athletes?**

Results: Statistical comparisons could not be made without individual-level data from traditional sport athletes. Evidenced in Table 24, University 3's traditional sport athletes' average GPA (M = 3.29) was slightly higher than their esports counterparts (M =3.17), while University 10's esports players average GPA (M = 3.32) was slightly higher than the traditional sport athletes (M = 3.29).

Table 24. Grade Point Average (GPA) of Student Body, Traditional Sport Varsity Athletes, and Esports Players

VOICE-affiliated Institution	Avg. GPA of Entire Student Body (Undergrad & Grad)	Avg. GPA of Undergraduate Student Body	Avg. GPA of Entire Graduate Student Body	Avg. GPA of all Varsity Athletes	Avg. GPA of Esports Players
University 1	**3.59** (*n*=53,363)	3.57 (*n*=20,592)	3.63 (*n*=32,771)	*n/a*	**3.65** (*n*=59)
University 2	*n/a*	*n/a*	*n/a*	*n/a*	**3.65** (*n*=26)
University 3	*n/a*	*n/a*	*n/a*	3.29	**3.17** (*n*=54)
University 4	*n/a*	*n/a*	*n/a*	*n/a*	**3.40** (*n*=29)
University 5	*n/a*	*n/a*	*n/a*	*n/a*	**3.37** (*n*=22)
University 6	*n/a*	*n/a*	*n/a*	*n/a*	**3.49** (*n*=10)
University 7	*n/a*	*n/a*	*n/a*	*n/a*	**3.12** (*n*=71)
University 8	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*
University 9	*n/a*	*n/a*	*n/a*	*n/a*	**2.88** (*n*=81)
University 10	*n/a*	*n/a*	*n/a*	3.29	**3.32** (*n*=95)
University 11	*n/a*	*n/a*	*n/a*	*n/a*	**3.58** (*n*=26)
University 12	*n/a*	*n/a*	*n/a*	*n/a*	**3.18** (*n*=43)
				Average Esports Player GPA:	**3.27** (*n*=516)

Note. n/a = not available. Each institution's office of academic records (or equivalent) was contacted through personal correspondence asking for the average GPA of the entire student body, undergraduate students, and graduate students. No institution would offer this data except for University 1, which posts this online. Also, each institution's department of athletics was contacted via personal correspondence about the average GPA of all traditional sport varsity athletes, but this information was only obtained from two institutions. All institution data is for Fall 2024. Esports GPA data obtained from program directors via the varsity player spreadsheets, except for University 4 and University 6 which does not collect that data. Those two schools had their GPA calculated from the self-reported player survey.

Academic Majors: Esports Player Academic Majors

Research Question:
- **What are the prime <u>academic majors</u> of VOICE-affiliated collegiate esports players?**

Results: As seen in Table 25, the top five self-reported majors by the esports players (*n* = 227) were computer science (19%), engineering (15%), business/management (6%), information technology (IT)/cybersecurity (almost 6%), and game design/interactive media (4%).

Academic Majors: Science, Technology, Engineering and Math (STEM)

Research Question:
- **What percentage of VOICE-affiliated collegiate esports players <u>major in STEM</u> (science, technology, engineering, and math) fields?**

Results: Nearly two-thirds (65%) of esports players majored in science, technology, engineering, or math (STEM)-related fields, as seen in Table 25.

Table 25. STEM vs. Non-STEM Academic Majors Self-reported by Esports Players

STEM Majors	Count (n)	Percentage (%)	Non-STEM Majors	Count (n)	Percentage (%)
Computer Science	44	19.4%	Business/Management	14	6.2%
Engineering (any)	35	15.4%	Accounting	9	4.0%
IT/Cybersecurity	13	5.7%	Economics	9	4.0%
Game Design/Interactive Media	10	4.4%	Marketing	7	3.1%
Math/Statistics/Analytics/ Actuarial Science	9	4.0%	Communications	5	2.2%
Psychology	7	3.1%	Finance	5	2.2%
Biology	6	2.6%	Sport Management	5	2.2%
Health/Fitness/Exercise Science	5	2.2%	Education/Teacher Ed.	4	1.8%
Biochemistry	2	0.9%	Art (fine and performing)	3	1.3%
Esports (any)	2	0.9%	Political Science	3	1.3%
Forensic Science	2	0.9%	English	2	0.9%
Meteorology	2	0.9%	Film/Cinema	2	0.9%
Astronomy	1	0.4%	History	2	0.9%
Aviation	1	0.4%	Sociology	2	0.9%
Chemistry	1	0.4%	Air Traffic Management	1	0.4%
Clinical/Translational Science	1	0.4%	Foreign Language (any)	1	0.4%
Data Science	1	0.4%	Global Studies	1	0.4%
Geology	1	0.4%	Journalism	1	0.4%
Marine Biology	1	0.4%	Policy Study	1	0.4%
Information Systems	1	0.4%	Public Affairs	1	0.4%
Nursing	1	0.4%	Undeclared/Exploratory	1	0.4%
Physical Therapy	1	0.4%			
Physics	1	0.4%			
Total STEM:	**148**	**65.2%**	**Total Non-STEM:**	**79**	**34.8%**

Note. Data obtained from the player survey (*n* = 227).

Academic Majors: Top Student Body Majors vs. Esports Player Majors

Research Question:

- **How do the prime <u>academic majors</u> of VOICE-affiliated collegiate esports players <u>compare</u> to the top fields of study of the total student body?**

Results: While the esports player sample sizes are relatively small, Table 26 displays the top three most prevalent Bachelor's and Master's degree programs by field of study at each VOICE-affiliated institution compared to the top three self-reported esports player majors at that institution. As indicated by a " * ", 7 of the 11 institutions with data showed esports players majoring in *computer science* when that was not one of the top 3 fields of study at that institution. The second most frequent esports player major that did not match one of the top 3 fields of study at 4 of the 11 institutions was *engineering (any)*.

VOICE Institution	Category	Top 3 Most Awarded Bachelor's Degrees by Program & Top 3 Esports Player Bachelor's Majors	Top 3 Most Awarded Master's Degrees by Program & Top 3 Esports Player Master's Majors
University 1	Institution	• Engineering (**46.5%**; *n* = 1,964) • Computer & Information Sciences & Support Services (**25.6%**; *n* = 1,083) • Business, Management, Marketing, & Related Support Services (**8.3%**, *n* = 351)	• Computer & Information Sciences & Support Services (**48.8**%; n = 3,225) • Business, Management, Marketing, & Related (**23.1%**, n = 1,527) • Engineering (**20%**; n = 1,320)
	Esports (*n*=10)	• Computer Science (**40.0%**; *n* = 4) • Engineering (**20.0%**; *n* = 2) • *n = 1 for each remaining major*	• Computer Science (**10.0%**; *n* = 1) • Engineering (**10.0%**; *n* = 1)
University 2	Institution	• Health Professions & Related Programs (**29.8%**; n = 287) • Business, Management, Marketing, & Related (**17.4%**; n = 168) • Psychology (**12.8%**; n = 123)	• Computer & Information Sciences & Support Services (**57.3%**; n = 707) • Business, Management, Marketing, & Related (**21.8%**; n = 269) • Military Technologies & Applied Sciences (**6.2%**; n = 76)
	Esports (*n*=19)	• *Computer Science (**31.6%**; *n* = 6) • Business / Management (**10.5%**; *n* = 2) • Marketing (**10.5%**; *n* = 2); Psychology (**10.5%**; *n* = 2)	*n/a*
University 3	Institution	• Business, Management, Marketing, & Related (**27.6%**; *n* = 1,148) • Education (**8%**; *n* = 333) • Communication, Journalism, & Related (**7.3%**; *n* = 302)	• Education (**22.6%**; n = 200) • Biological & Biomedical Sciences (**22.2%**; n = 196) • Business, Management, Marketing, & Related (**13.7%**; n = 121)
	Esports (*n*=21)	• *Computer Science (**23.8%**; *n* = 5) • *Information Technology / Cybersecurity (**19.0%**; *n* = 4) • *Game Design / Games and Simulations (**14.3%**; *n* = 3)	*n/a*
University 4	Institution	• Communication, Journalism, & Related (**14.7%**; n = 484) • Social Sciences (**12.6%**; *n* = 415) • Business, Management, Marketing, & Related (**12.5%**; *n* = 409)	• Computer & Information Sciences & Support Services (**23.6%**; n = 601) • Business, Management, Marketing, & Related (**18.8%**; n = 478) • Communication, Journalism, & Related Programs (**11.9**%; n = 304)
	Esports (*n*=30)	• *Computer Science (**13.3%**; *n* = 4) • *Engineering (**13.3%**; *n* = 4) • *Information Technology / Cybersecurity (**10.0%**; *n* = 3)	• Information Systems (**3.3%**; *n* = 1) • Information Technology / Cybersecurity (**3.3%**; *n* = 1)
University 5	Institution	• Social Sciences (**15.8%**; n = 1,329) • Psychology (**12.7%**; n = 1,067) • Engineering (**12.1%**; n = 1,019)	• Business, Management, Marketing, & Related (**27.6%**; n = 542) • Engineering (**15.7%**; n = 327) • Computer & Information Sciences & Support Services (**11.2%**; n = 230)
	Esports (*n*=14)	• *Computer Science (**50.0%**; *n* = 7) • Economics (**21.4%**; *n* = 3) • *Game Design and Interactive Media (**14.3%**; *n* = 2)	*n/a*
University 6	Institution	• Social Sciences (**24.3**%; n = 2,228) • Biological & Biomedical Sciences (**15.5**%; n = 1,423) • Psychology (**11.6%**; n = 1,063)	• Business, Management, Marketing, & Related (**27.7%**; n = 1,100) • Engineering (**15.6%**; n = 617) • Health Professions & Related Programs (**9.4%**; n = 373)

	Esports (*n*=10)	• *Engineering (any) (**20.0%**; *n* = 2) • *Mathematics / Statistics (**20.0%**; *n* = 2) • *n = 1 for each remaining major*	*n/a*
University 7	Institution	• Business, Management, Marketing, & Related (**21.5%**; *n* = 654) • Engineering (**8.4%**; *n* = 257) • Biological & Biomedical Sciences (**8.1%**; *n* = 247)	• Education (**21.9%**; n = 216) • Business, Management, Marketing, & Related (**16.9%**; n = 166) • Public Administration & Social Service Professions (**14.2%**; n = 140)
	Esports (*n*=24)	• *Computer Science (**20.8%**; *n* = 5) • Biology / Marine Biology (**12.5%**; *n* = 3) • Engineering (**12.5%**; *n* = 3)	*n/a*
University 8	Institution	• Business, Management, Marketing, & Related (**20.5%**; *n* = 1,074) • Health Professions & Related (**13.9%**; *n* = 730) • Engineering (**9.7%**; *n* = 506)	• Public Administration & Social Service Professions (**41.2%**; n = 790) • Health Professions & Related (**10.5%**; n = 201) • Business, Management, Marketing, & Related (**10.3%**; n = 198)
	Esports (*n*=0)	*n/a*	*n/a*
University 9	Institution	• Transportation & Materials Moving (**17.2%**; *n* = 320) • Business, Management, Marketing, & Related Support Services (**15.1%**; *n* = 281) • Health Professions & Related (**13.1%**; *n* = 244)	• Health Professions & Related (**29.6%**; n = 259) • Education (**22.3%**; n = 195) • Business, Management, Marketing, & Related (**10.3%**; n = 90)
	Esports (*n*=20)	• *Engineering (**30.0%**; *n* = 6) • *Computer Science (**15.0%**; *n* = 3) • *Forensic Science (**10.0%**; *n* = 2); Psychology (**10.0%**; *n* = 2)	• Clinical and Translational Science (**5.3%**; *n* = 1)
University 10	Institution	• Business, Management, Marketing, & Related Support Services (**25.6%**; n = 1,144) • Engineering (**10.8%**; n = 482) • Communication, Journalism, & Related (**8.6%**; n = 385)	• Business, Management, Marketing, & Related (**23.9%**; n = 563) • Public Administration & Social Service Professions (**15.0%**; n = 354) • Legal Professions & Studies (**10.3%**; n = 242)
	Esports (*n*=57)	• Engineering (any) (**14.0%**; *n* = 8) • *Computer Science (**10.5%**; *n* = 6) • *n = 3 for five other majors*	• Business / Management (**3.5%**; *n* = 2) • *Computer Science (**1.8%**; *n* = 1) • *Sociology (**1.8%**; *n* = 1)
University 11	Institution	• Business, Management, Marketing, & Related (**25.6%**; *n* = 1,221) • Visual & Performing Arts (**10.8%**; *n* = 631) • Social Sciences (**10.8%**; *n* = 539)	• Business, Management, Marketing, & Related (**20.4%**; n = 2,228) • Computer & Information Sciences & Support Services (**15.5%**; n = 1,697) • Engineering (**12.1%**; 1,322)
	Esports (*n*=3)	• *Biology (**33.3%**; *n* = 1) • Business / Management (**33.3%**; *n* = 1) • *Mathematics / Statistics (**33.3%**; *n* = 1)	*n/a*
University 12	Institution	• Business, Management, Marketing, & Related (**17.3%**; *n* = 375) • Health Professions & Related (**14.2%**; *n* = 308) • Education (**13.6%**; *n* = 296)	• Computer & Information Sciences & Support Services (**32.3%**; n = 387) • Business, Management, Marketing, & Related (**15.5%**; n = 186) • Education (**11.2%**; n = 134)
	Esports (*n*=19)	• *Engineering (**31.6%**; *n* = 6) • *n = 2 for four other majors*	• Sport Management (**5.3%**; *n* = 1)

Note. * = top esports player major did not match one of the top three majors at the institution; *n/a* = not applicable or available. Institution data compiled from the National Center for Education Statistics (NCES) where the most recent data available at the time of this study was for the 2023-2024 academic year. Esports player majors obtained from the self-report player's survey only (*n* = 227).

Enrollment and Recruitment: Reason Players Selected their Current University

Research Question:

- **What is the single main reason VOICE-affiliated collegiate esports players selected their current university?** *[open response]*

Results: The most common reasons students selected their current university were perceived academic program quality and reputation, scholarships/financial aid, the competitive and/or academic esports program, and the convenience or proximity to home (Table 27). Other less significant themes included the perceived campus life/environment, family influences, and career-related opportunities such as post-graduate opportunities, internships, or industry connections. Of note, University 4's varsity esports program only started the semester before data collection (Fall 2024), which may have impacted results. Overall, 30 out of 219 (13.7%) different students mentioned or alluded to esports (i.e., *"League of Legends"*) within their response. Table 28 displays the individual institution's top themes.

Table 27. Top Self-reported Reasons Esports Players Selected their Current University

Theme	Theme Description	Frequency Count	Representative Quote
Academic Programs & Reputation	Selected their university based on the strength of their academic program, ranking, or reputation in their chosen field	62 (28.3%)	*"One of the best engineering schools."* (University 1) *"Meteorology program is #1 in the country."* (University 10) *"Esports Major/Program."* (University 9) *"Business major program."* (University 11)
Scholarships, Financial Aid & Cost	Selected their university due overall cost and/or receiving scholarships or financial assistance	57 (26.0%)	*"Full Ride Scholarship/good team." (*University 2*)* *"Good financial aid package."* (University 4) *"Financial Aid."* (University 3)
Proximity to Home & Convenience	Location and being close to home, often due to cost, family, or in-state tuition	36 (16.4%)	*"Close to my hometown, and in-state tuition."* (University 10) *"The convenience of an in-state college."* (University 7) *"Location from home."* (University 6)
Esports Program & Opportunities	Selected their university specifically for its esports program, competitive teams, or related career opportunities	30 (13.7%)	*"The Overwatch esports program."* (University 2) *"Esports Team."* (University 3) *"Their game design program and Esports."* (University 12)

Note. Data obtained from player survey (*n* = 219).

Table 28. Individual Institution Top Themes: Collegiate Esports Player's Single Main Reason for Selecting Current University

Institution	Sample Size	Top Themes, Frequency Count, and Representative Quote
University 1	10	• **Academic Programs & Reputation** (7): *"STEM programs."* • **Ranking & Prestige** (3): *"School ranking."* • *Note: esports was not mentioned by any student.*
University 2	19	• **Scholarships & Financial Support** (9): *"The Esports program / Scholarship I was offered."* • **Esports Program & Competitive Opportunities** (8): *"To join the esports program here at University 2."*
University 3	20	• **Scholarships & Financial Support** (5): *"Scholarship."* • **Academic Programs** (6): "Graphic Design Program." • *Note: esports was noted by 2 students: "Esports management master degree" and "Esports Team"*
University 4	26	• **Academics & Academic Program** (7): *"Sport Analytics Program."* • **Opportunities & Campus Environment** (5): *"I enjoyed the overall environment of the campus as well as the many opportunities such as clubs (esports), events, jobs, and much more being open to everyone."* • **Esports Program** (4): *"The Esports Program."*
University 5	14	• **Academics & Education** (6): *"High academic level also high esports program quality."* • **Esports Program** (5): *"The Esports program." "Computer Science + good esports."*
University 6	9	• **Academics & Education** (5): *"The amount of academic resources the school has."* • **Location/Proximity** (3): "Proximity." *"Location from home."* • *Note: esports was not mentioned by any student.*
University 7	21	• **Location/Proximity to Home** (10): *"Proximity to home." "Here at home."* • **Esports Program** (2): *"Esports program."* • **Academic Program/Major** (2): *"Has the major I wanted to take."*
University 9	19	• **Program Strength or Major** (7): *"Strength of program (aerospace)"* • **Location/Proximity to Home** (5): *"I got accepted and it is close to home."* • *Note: the esports program/major was noted by 2 students.*
University 10	58	• **Location/Proximity to Home** (15): *"Close to home and affordability."* • **Scholarships and Financial Considerations** (12): *"Money."* • **Academic Programs and Degree Options** (12): *"Best program for my major."* • *Note: esports was noted by 1 student.*
University 11	3	• *3 Responses:* *"Business major program." "Opportunity/cost." "Location."* • *Note: esports was not mentioned by any student.*
University 12	18	• **Financial Considerations** (6): *"Money and close to home." "Tuition Pricing."* • **Academic Programs & Career Opportunities** (5): *"Their game design program and Esports."* • *Note: esports was noted by 3 students. "Esports scholarship."*

Note. Data obtained from the player survey (*n* = 219); two students not included in this analysis were from satellite institutions.

Enrollment and Recruitment: Esports Program's Impact on Attending Current University

Research Question:

- **To what extent did having an esports program <u>impact</u> VOICE collegiate esports players' attending their current university (i.e., <u>reason for attending</u>)?**

Results: Most VOICE-affiliated esports players reported that the esports program did not impact their decision to attend their current university, while over 40% reported it at least had a little impact, including about 12% reporting the esports program was the main reason they selected their current university. Of note, these responses include 26 responses from University 4 players where their varsity esports program only started the previous semester (Fall 2024) prior to data collection; University 4's esports club program started Fall 2017. If you remove University 4 players, the results of the remaining players ($n = 191$) just slightly move forward in the direction of favoring esports program impact:

- 1 (not at all): $n = 106$; 55.5%
- 2 (a little bit): $n = 42$; 22.0%
- 3 (very much so): $n = 20$; 10.5%
- 4 (that is the main reason): $n = 23$; 12.0%

Table 29. Esports Players' Perceived Impact of the Esports Team's/Club's/Program's on Attending Their Current University

Likert-style Question: Rate the following sentence according to the 4-point scale: "*I decided to attend my current university because of the esports team/club/program.*"	**Count (*n*)**	**Percentage (%)**
1 = Not at all	126	58.1
2 = A little bit	43	19.8
3 = Very much so	22	10.1
4 = That is the main reason why I chose my current university	26	12.0

Note. Data obtained from esports player survey ($n = 217$).

Enrollment and Recruitment: Players First Awareness of Competitive Esports Program

Research Question:
- **How** did VOICE-affiliated collegiate esports players first become **aware** of their university's competitive esports program? *[open response]*

Results: The most common way these collegiate players first became aware of their university's esports program was through **friends and word of mouth**, **Discord**, **university websites and online searches**, other forms of **social media** (e.g., X/Twitter, Instagram), and **club fairs, campus events, and orientation** (Table 30). **Collegiate esports events and competitions** (either as a player or spectator), **high school esports**, and **advertisements** (i.e., flyers, emails) were less common but still relevant pathways.

Table 30. Ways Esports Players Reported First Becoming Aware of their University's Competitive Esports Program

Theme	Theme Description *Collegiate esports players first became aware of the competitive esports program…*	Frequency Count	Representative Quote
Friends & Word of Mouth	…through friends, roommates, or other acquaintances	49 *(22.4%)*	*"Through my freshman year roommate."* (University 3) *"A friend was on the Overwatch team."* (University 10) *"Through other students."* (University 7)
Discord	…after finding the esports program's Discord server or becoming aware through Discord	37 *(16.9%)*	*"I searched for the club and joined their discord."* (University 1) *"Through club discord."* (University 4) *"I searched esports for University 7 and I found the discord and the sites."* (University 7)
Online Searches or the University Website	…through direct searches on the university website or Google	31 *(14.2%)*	*"Google search and visiting website."* (University 10) *"Saw it last year online."* (University 5) *"I was interested in esports, so I checked online if they had a team."* (University 12)
Social Media & Online Searches	…through social media platforms like Instagram, and Twitter (X)	30 *(13.7%)*	*"Tryout post on Instagram."* (University 4) *"Through social media."* (University 10) *"Through a tweet."* (University 2)
Club Fairs, Campus Events, or Orientation	… during club fairs, welcome events, campus tours, or orientation activities	28 *(12.8%)*	*"Orientation week stands."* (University 9) *"My first tour back in 2018."* (University 3) *"Through club rush."* (University 6)
Esports Competitions or Events as a Player or Spectator	…through competing in or attending university esports events	20 *(9.1%)*	*"The freshmen Mario Kart tournament."* (University 10) *"I became aware of my Esports Program through seeing them playing in online tournaments."* (University 2) *"Esports fairs and events."* (University 9) "College CoD." (University 12)
High School Esports & Recruitment	… through high school esports competitions or high school recruitment efforts	13 *(5.9%)*	*"State high school tournament."* (University 9) *"Was scouted in high school."* (University 12) *"Coach introduction in high school esports tournament."* (University 9)
Email, Flyers, or Advertisements	… direct university outreach, such as emails, posters, or advertisements	8 *(3.7%)*	*"I got an email from the Esports Program."* (University 5) *"Flyer.";* *"Poster or Discord Hub."* (University 10) *"Advertising in ICS Class."* (University 7)

Note. Data obtained from player survey (*n* = 219).

Enrollment and Recruitment: Competitive Esports Program Player Recruitment

Research Question:
- **What percentage of VOICE-affiliated collegiate esports players were <u>recruited by their university's competitive esports program</u> to attend that university?**

Results: As seen in Table 31, VOICE-affiliated esports directors reported that they recruited over three-quarters (76%) of their varsity esports players (*n* = 598). However, less than one-quarter (24%) of surveyed esports players (*n* = 219) reported that they were recruited to play esports by the university esports program.

Table 31. Esports Players Recruited by the Esports Program as Reported by Esports Directors and Players

Esports Director Varsity Player Spreadsheet			Esports Player Survey		
	Count (n)	Percentage (%)		Count (n)	Percentage (%)
"Did you actively recruit student?" (*n* = 598)			*"Were you recruited to your current university to play esports?"* (*n* = 219)		
Yes	460	76.9	Yes	53	24.2
No	138	23.1	No	170	77.6
Esports Scholarship (*n* = 598)			**Esports Scholarship** (*n* = 218)		
Full	30	5.0	Full	21	9.6
Partial	69	11.5	Partial/In-State Tuition Waiver	32	14.7
Graduate Assistantship	1	0.2	*n/a*		
None	498	83.3	None	165	75.7

Note. Data obtained from esports director's varsity player spreadsheet (*n* = 598) and esports player survey (*n* = 219).

Enrollment and Recruitment: Attended Because of Esports Program Recruitment

Research Question:

- **To what extent did VOICE-affiliated collegiate esports players <u>attend</u> their current university <u>because of esports program recruitment</u>?**

Results: A strong majority of VOICE-affiliated esports players reported that esports program recruitment did not impact their decision to attend their current university, while almost 20% reported it at least had a little impact, including about 8% reporting the esports program recruitment was the main reason they selected their current university (Table 32). Of note, these responses include 26 responses from University 4 players where their varsity esports program only started the previous semester (Fall 2024) prior to data collection; University 4's esports club program started Fall 2017. If you exclude the University 4 players, the results of the remaining players ($n = 191$) show the impact on esports program recruitment remains largely unchanged:

- 1 (not at all): $n = 152$; 80.0%
- 2 (a little bit): $n = 13$; 6.8%
- 3 (very much so): $n = 6$; 3.1%
- 4 (that is the main reason): $n = 20$; 10.5%

Table 32. Esports Players' Perceived Impact of the Esports Recruitment on Attending Their Current University

Likert-style Question: Rate the following sentence according to the 4-point scale: "*I decided to attend my current university because I was recruited to play on the esports team*."	Count (*n*)	Percentage (%)
1 = Not at all	175	80.6
2 = A little bit	15	6.9
3 = Very much so	7	3.2
4 = That is the main reason why I chose my current university	20	9.2

Note. Data obtained from esports player survey ($n = 217$).

Enrollment and Recruitment: Attended Because of Esports Academic Program

Research Question:
- **To what extent did VOICE-affiliated collegiate esports players <u>attend</u> their current university <u>because of the esports academic/degree program</u>?**

Results: A strong majority of VOICE-affiliated esports players ($n = 151$) reported that they do not take any academic esports courses at their university (Table 33). Overall, almost 12% reported that the academic esports courses at their university had at least a little impact in deciding to attend their university, including 4% responding that the academic esports program was the main reason for attending their current university. If you only evaluate the students who take academic esports coursework ($n = 66$), about 40% reported that esports academic courses at their university had at least "a little impact" in deciding to attend, including over 13% reporting that was the main reason for attending.

Table 33. Esports Players' Perceived Impact of Attending Their Current University based on the Esports Academic/Degree Program

Likert-style Question: Rate the following sentence according to the 4-point scale: "*I decided to attend my current university because of the esports academic/degree program.*"	**Count (*n*)**	**Percentage (%)**	**Percentage (%) who take Esports Academic Coursework (*n* = 66)**
I do not take academic esports courses at my university.	151	69.6%	
1 = Not at all	40	18.4%	60.6%
2 = A little bit	10	4.6%	15.2%
3 = Very much so	7	3.2%	10.6%
4 = That is the main reason why I chose my current university	9	4.1%	13.6%

Note. Data obtained from the esports player survey ($n = 217$).

Enrollment and Recruitment: Recruitment Methods

Research Question:

- **What recruitment methods do VOICE-affiliated collegiate esports programs use to recruit competitive esports players?**

Results: The most prevalent esports player recruitment method for both VOICE-affiliated esports directors and staff was social media engagement (e.g., X, Discord, etc.) with 100% engagement, followed by campus recruitment events (Table 34). The next most prevalent player recruitment methods listed by directors were content creation, hosting or attending tournaments/competitions, and visiting high schools, while non-director staff noted scholarships, hosting or attending esports tournaments/competitions, and hosting camps, and visiting high schools.

Table 34. Collegiate Esports Player Recruitment Utilized by VOICE-affiliated Esports Directors and Staff

Collegiate Esports Player Recruitment Method (alphabetical)	Esports Directors		Esports Staff	
	Frequency (n)	Percentage (%)	Frequency (n)	Percentage (%)
Campus Recruitment Events	10	83.3	11	78.6
Conference/Conventions (host or attend)	7	58.3	7	50.0
Content Creation	9	75.0	7	50.0
Host Camps	5	41.7	8	57.1
Scouting Events/Combines/Showcases (host or attend)	5	41.7	4	28.6
Scholarships	7	58.3	11	78.6
Social Media Engagement (X, Discord, etc.)	12	100.0	12	85.7
Tournaments/Competitions (host or attend)	8	66.7	9	64.3
Utilize Scouting/Recruitment Third-parties	3	25.0	6	42.9
Visit High Schools	8	66.7	8	57.1
Other: Host Visiting High Schools	1	8.3	0	0.0
Other: Recruitment Interest Form	0	0.0	1	7.1

Note. Data obtained from the director (*n* = 12) and staff (*n* = 14) surveys. "Other" were open response listings, while all other items were pre-listed in the question with "check all that apply" respondent directions.

Enrollment and Recruitment: Out-of-State Esports Players

Research Question:
- **What percentage of VOICE collegiate esports players are <u>out-of-state students</u> compared to the total student body?**

Method: A two-proportion z-test was conducted for each institution to compare the proportion of out-of-state students within its VOICE-affiliated varsity esports program ($n= 538$) against the institutional out-of-state rate (NCES/IPEDS data). Only schools with available general student body data were included in the analysis.

Results: As seen in Table 35, esports directors reported 40.3% of varsity esports players ($n = 538$) were out-of-state students, including 8.0% ($n = 43$ of 538) international students on the varsity player spreadsheets. For the player survey ($n = 220$), 40.5% ($n = 89$; including 9.1% [$n = 20$] international students) reported being out-of-state students, with 59.5% ($n = 131$) of players reported being in-state students. This data closely mimics the varsity player spreadsheets. See the international student section as well in the "Diversity and Inclusion" results section above. There were significant differences between varsity esports player data obtained from the varsity player spreadsheets versus institutional data within five institutions as follows:

1. **Significant Overrepresentation of Out-of-state Varsity Esports Players**:

   - **University 2**: 96.7% of varsity esports players ($n = 30$ of 31) were out-of-state students vs. 53.7% of the general student body ($z = 5.41$, $p < 0.001$).
   - **University 5** 34.8% of varsity esports players ($n = 8$ of 23) were out-of-state students vs. 9.5% of the general student body ($z = 3.89$, $p < 0.001$).
   - **University 12**: 37.3% of varsity esports players ($n = 19$ of 51) were out-of-state students vs. 11.6% of the general student body ($z = -5.54$, $p < 0.001$).

2. **Significant Underrepresentation of Out-of-state Varsity Esports Players**:

   - **University 7**: 7.0% of varsity esports players ($n = 5$ of 71) were out-of-state students vs. 36.0% of the general student body ($z = 5.07$, $p < 0.001$).
   - **University 10**: 22.7% of varsity esports players ($n = 22$ of 97) were out-of-state students vs. 45.3% of the general student body ($z = 4.45$, $p < 0.001$).

3. **No Significant Differences ($p > 0.05$)**:

   - *University 1*, *University 3*, *University 4*, *University 9*, and *University 11* showed no statistically significant differences in out-of-state enrollment between varsity esports players and their respective student bodies.

Enrollment and Recruitment: Current University 100+ Miles Away from Home

Research Question:
- **What percentage of VOICE collegiate esports players' current university is <u>more than 100 miles from their permanent home</u>?**

Results: 52% of VOICE-affiliated collegiate esports players ($n = 227$) reported attending university more than 100 miles away from their permanent home (Table 35).

Table 35. Institution Out-of-State Students vs. Out-of-State Esports Players and Esports Players Attending University More Than 100 Miles from Their Permanent Home

Institution	Year of Student Body Data	General Student Body Out-of-State Students	Varsity Esports Players (n = 598) Out-of-State Students	Esports Players (n = 227) Attending University More than 100 Miles from their Permanent Home		
				Yes	No	Total
University 1	2023	40.3% *(n=19,304)*	40.7% *(n=24 of 59)*	10.0% *(n=1)*	90.0% *(n=9)*	10
University 2	2024	53.7% *(n=4,975)*	96.7% *(n=30 of 31)**	84.2% *(n=16)*	15.8% *(n=3)*	19
University 3	2024	~33.3% *(n=7,501)*	30.4% *(n=17 of 56)*	57.1% *(n=12)*	42.9% *(n=9)*	21
University 4	2023-2024	64.3% *(n=~14,756)*	77.1% *(n=27 of 35)*	83.3% *(n=25)*	16.7% *(n=5)*	30
University 5	2023-2024	~9.5% *(n=3,218)*	34.8% *(n=8 of 23)**	71.4% *(n=10)*	28.6% *(n=4)*	14
University 6	2024	~11.7% *(n=~5,481)*	n/a	30.0% *(n=3)*	70.0% *(n=7)*	10
University 7	2023	36.0% *(n=~6,932)*	7.0% *(n=5 of 71)**	13.0% *(n=3)*	87.0% *(n=20)*	23
University 8	2023-2024	~35.1% *(n=11,900)*	n/a	n/a	n/a	n/a
University 9	2024	60.37% *(n=~9,067)*	58.0% *(n=47 of 81)*	60.0% *(n=12)*	40.0% *(n=8)*	20
University 10	2023-2024	45.28% *(n=12,797)*	22.7% *(n=22 of 97)**	43.1% *(n=25)*	56.9% *(n=33)*	58
University 11	2024	40.0% *(n=8,409 undergrads)*	51.4% *(n=18 of 35)* 50.0% *(n=13 of 26 undergrads)*	100.0% *(n=3)*	0.0% *(n=0)*	3
University 12	2024	11.58% *(n=2,050)*	37.3% *(n=19 of 51)**	47.4% *(n=9)*	52.6% *(n=10)*	19
		Total:	40.3% *(n=217 of 538)*	52.4% *(n=119)*	47.6% *(n=108)*	**227**

Note. * = p < 0.001; *n/a* = not available. All data was collected from each institution's Institutional Research Office website (or equivalent institution posted "facts" reports). When not explicitly listed, percentages (%) or numbers (n) were calculated based on total number of students listed in Table 3, indicated by the estimate sign (~). It is likely that all data for out-of-state students is also captured within international student data (i.e., all international students are also considered out-of-state students). Out-of-state esports player (n = 538) data obtained from program directors via the varsity player spreadsheets while the distance from home data obtained from the esports player survey (n = 227).

Enrollment and Recruitment: Transferred to Current University

Research Question:
- **What percentage of VOICE-affiliated collegiate esports players transferred into their current university compared to the total student body?**

Methods: A two-proportion z-test was conducted for each institution to compare the percentage of undergraduate esports players who transferred to their current university (n = 217) versus the general undergraduate student body transfer rates as reported by the National Center for Education Statistics (NCES, Fall 2023).

Results: As seen in Table 36, over one-quarter of undergraduate esports players, and across the entire player sample ($n = 227$) over 22% of esports players, transferred into their current university. When just analyzing undergraduate students (Table 36), 8 of 11 VOICE-affiliated institutions demonstrate significant differences in undergraduate transfer rates within the esports program compared to the general student body.

1. **Significant Overrepresentation of "Transfer In" Esports Players**:

   - **University 1**: 50.0% of esports players ($n = 4$) transferred in vs. ~5.7% of the general student body ($z = 5.34$, $p < 0.001$).
   - **University 2**: 63.2% of esports players ($n = 12$) transferred in vs. ~15.8% of the general student body ($z = 5.66$, $p < 0.001$).
   - **University 3**: 14.3% of esports players ($n = 3$) transferred in vs. ~2.0% of the general student body ($z = 4.01$, $p < 0.001$).
   - **University 5**: 50.0% of esports players ($n = 7$) transferred in vs. ~9.8% of the general student body ($z = 5.06$, $p < 0.001$).
   - **University 7**: 30.4% of esports players ($n = 7$) transferred in vs. ~10.1% of the general student body ($z = 3.23$, $p = 0.001$).
   - **University 10**: 20.4% of esports players ($n = 11$) transferred in vs. ~4.6% of the general student body ($z = 5.52$, $p < 0.001$).
   - **University 11**: 66.7% of esports players ($n = 2$) transferred in vs. ~6.4% of the general student body ($z = 4.18$, $p < 0.001$).
   - **University 12**: 27.8% of esports players ($n = 5$) transferred in vs. ~10.1% of the general student body ($z = 2.49$, $p = 0.013$).

2. **No Significant Differences ($p > 0.05$)**:

   - *University 4*, *University 6*, and *University 9* showed no statistically meaningful difference regarding undergraduate esports player and general student body transfer in rates.

Table 36. Institution Total Transfer-In (Undergraduate) Students vs. Transfer-In Esports Program Players

Institution	Incoming Transfer Undergraduate Students *(NCES, Fall 2023)*	UNDERGRADUATE Esports Players *(n = 217)* who Transferred to their University		TOTAL Esports Players *(n = 227)* who Transferred to their University	
		Yes	No	Yes	No
University 1	~5.7% *(n=1,113)*	50.0% *(n=4)**	50.0% *(n=4)*	40.0% *(n=4)*	60.0% *(n=6)*
University 2	~15.8% *(n=959)*	63.2% *(n=12)**	36.8% *(n=7)*	63.2% *(n=12)*	36.8% *(n=7)*
University 3	~2.0% *(n=330)*	14.3% *(n=3)**	85.7% *(n=18)*	14.3% *(n=3)*	85.7% *(n=18)*
University 4	~2.1% *(n = 324)*	7.1% *(n=2)*	92.9% *(n=26)*	10.0% *(n=3)*	90.0% *(n=27)*
University 5	~9.8% *(n=2,883)*	50.0% *(n=7)**	50.0% *(n=7)*	50.0% *(n=7)*	50.0% *(n=7)*
University 6	~11.2% *(n=3,699)*	20.0% *(n=2)*	80.0% *(n=8)*	20.0% *(n=2)*	80.0% *(n=8)*
University 7	~10.1% *(n=1,477)*	30.4% *(n=7)**	69.6% *(n=16)*	30.4% *(n=7)*	69.6% *(n=16)*
University 8	~3.7% *(n=891)*	*n/a*	*n/a*	*n/a*	*n/a*
University 9	~9.9% *(n=1,015)*	10.5% *(n=2)*	89.5% *(n=17)*	10.0% *(n=2)*	90.0% *(n=18)*
University 10	~4.6% *(n=1,018)*	20.4% *(n=11)**	79.6% *(n=43)*	24.1% *(n=14)*	75.9% *(n=44)*
University 11	~6.4% *(n=1,335)*	66.7% *(n=2)**	33.3% *(n=1)*	66.7% *(n=2)*	33.3% *(n=1)*
University 12	~10.1% *(n=1,295)*	27.8% *(n=5)**	72.2% *(n=13)*	26.3% *(n=5)*	73.7% *(n=14)*
	Total:	26.3% *(n=57)*	73.7% *(n=160)*	22.5% *(n=61)*	77.5% *(n=166)*

Note. * = $p < 0.05$; *n/a* = not available. NCES = National Center for Education Statistics. Estimated percentages were calculated based upon the number of "transfer-in" undergraduate students divided by the total number of undergraduate students at that institution for Fall 2023 listed by NCES. Esports player data obtained from player survey (*n* = 227).

Esports Scholarships: Full and Partial Esports Scholarships

Research Question:
- **What percentage of VOICE collegiate esports players are on <u>full and partial esports scholarships</u>?**

Results: As seen in Table 37 that displays data from the varsity player spreadsheets, less than 5% ($n = 29$) of VOICE-affiliated varsity esports players ($n = 598$) have a **full esports scholarship**, all of which come from University 2 where 97% of their varsity roster has a full esports scholarship. Of note, Table 6's data obtained from the esports director survey indicates that University 2 offers 30 "partial" esports scholarships as the director indicated that the esports scholarship annual budget fulfills a "full scholarship" after other non-esports scholarships are applied. Moreover, from a smaller sample of players who took the esports player survey ($n = 219$), 9.6% ($n = 21$) reported having a full scholarship (Table 14), but it is likely University 2 players ($n = 18$) slightly skewed this player survey question results.

In addition, Table 37 shows that only about 12% ($n = 69$) of VOICE-affiliated varsity esports players ($n = 598$) have a **partial esports scholarship**. Most of these partial esports scholarships come from University 5, University 12, and University 9. Overall, 7 of 11 institutions offer any partial esports scholarships, but 3 of these institutions only offer one individual esports partial scholarship total. Moreover, 2 of 11 institutions listed 1 graduate assistantship (GA) each on their varsity player spreadsheet, indicating less than 0.5% of VOICE-affiliated varsity players have a GA position that also includes playing on a varsity collegiate esports team. Finally, from a smaller sample of players who took the esports player survey ($n = 219$), 15.1% ($n = 33$) reported having a partial or in-state tuition waiver esports scholarship (Table 14).

Strikingly, only 0.3% of VOICE-affiliated female players ($n = 2$ of 598) earn any type of collegiate esports scholarship, with none earning a full scholarship (Table 37); as listed in Table 16, 6.9% ($n = 37$ of 538) of this sample were **female**. Moreover, from a smaller sample of players who took the esports player survey ($n = 219$), 1 of 21 players having a full esports scholarship (Table 14) was **non-binary** (4.8%) while the rest (95.2%; $n = 20$) were **male**. Likewise, 1 of 33 players having a partial or in-state tuition waiver esports scholarship (Table 14) was **female** (3.0%) while the rest (97.0%; $n = 32$) were **male**. From the same esports player survey sample (Table 14), the race/ethnicity breakdown of any player reporting to earn a full or partial esports scholarship ($n = 54$) were as follows: 48.1% ($n = 26$) **White (non-Hispanic)**, 27.8% ($n = 15$) **Asian**, 13.0% ($n = 7$) **Two or More Races**, 5.6% ($n = 3$) **Hispanic**, 3.7% ($n = 2$) **Other**, and 1.9% ($n = 1$) **Native Hawaiian or Other Pacific Islander**. Lastly, according to Table 37, the majority of full esports scholarship players are international students (62%), with a slight majority of partial esports scholarship students being in-state students (54%)

Table 37. VOICE-affiliated Varsity Esports Player Scholarships

Institution	Full Scholarship	Partial Scholarship	Graduate Assistantship	None	Total
University 1				**100%** (*n=59*)	59
University 2	**97%** (*n=29*)*	**3%** (*n=1*)*			30
University 3		**2%** (*n=1*)		**98%** (*n=55*)	56
University 4		**3%** (*n=1*)	**3%** (*n=1*)	**94%** (*n=33*)	35
University 5		**100%** (*n=23*)			23
University 6				**100%** (*n=60*)	60
University 7		**8%** (*n=6*)		**92%** (*n=65*)	71
University 9		**15%** (*n=12*)		**85%** (*n=69*)	81
University 10				**100%** (*n=97*)	97
University 11				**100%** (*n=35*)	35
University 12		**49%** (*n=25*)	**2%** (*n=1*)	**49%** (*n=25*)	51
Total:	**4.8%** (*n=29*)	**11.5%** (*n=69*)	**0.3%** (*n=2*)	**83.3%** (*n=498*)	**598**
Gender by Scholarship Type					
Male:	**100%** *(n=29)*	**97%** *(n=67)*	**100%** *(n=2)*		
Female:	**0%** *(n=0)*	**3%** *(n=2)*	**0%** *(n=0)*		
Out-of-State by Scholarship					
Out-of-State Student:	**97%** *(n=28)*	**46%** *(n=32)*	**50%** *(n=1)*		
Not Out-of-State Student:	**3%** *(n=1)*	**54%** *(n=37)*	**50%** *(n=1)*		
International by Scholarship					
International Student:	**62%** *(n=18)*	**6%** *(n=4)*	**100%** *(n=2)*		
Not International Student:	**38%** *(n=11)*	**94%** *(n=65)*	**0%** *(n=0)*		

Note: Data obtained from program directors via the varsity player spreadsheets (*n* = 598). No data provided by University 8. *Table 6, which is data obtained from the esports director survey, indicates that University 2 offers 30 "partial" esports scholarships as the esports scholarship budget fulfills a "full scholarship" after other non-esports scholarships are applied.

Esports Scholarships: Student Body Scholarships/Financial Aid vs. Esports Scholarships

Research Question:

- **What percentage of VOICE collegiate esports players are on a partial or full esports scholarship compared to the total student body on scholarship or financial aid?**

Results: Table 38's data reveals significant disparities between varsity esports players receiving scholarships and students awarded traditional grants or financial aid. However, direct comparison is methodologically problematic, as the universities' broad student financial aid category may include esports scholarships, while esports players themselves may simultaneously qualify for other need- or merit-based aid programs. This dual overlap obscures distinctions between the groups, conflating esport-specific funding with institutional aid. A more valid approach would involve contrasting scholarship-awarded varsity esports players with traditional sport student-athletes holding athletic-based scholarships, isolating the unique impacts of sport-specific funding. Regrettably, member institutions did not provide access to the athletic scholarship data required for this targeted analysis, limiting the scope of inquiry. Of note, as seen in Table 7, three VOICE-affiliated institutions had non-player director/manager esports graduate assistantships: University 2 ($n = 3$), University 7 ($n = 2$), and University 12 ($n = 2$); one of University 12's graduate assistants was also an esports player (see Table 16).

Table 38. Student Financial Aid and Graduate Assistantships compared to Varsity Esports Player Scholarships

Institution	Student Financial Aid (NCES, 2022-2023) (Degree/Certificate-seeking Undergrads; percent awarded Aid)			Percentage of Graduate Students with Graduate Assistantships (GAs) (n = GAs; NCES, Fall 2023)	Varsity Esports Players with any Esports Scholarship (n = 598)
	Any Grant or Scholarship Aid	Pell Grants	Federal Student Loans		
University 1	69.0%	14.0%	20.0%	~16.9% (n=4,805)	0.0% (n=0 of 59)
University 2	71.0%	36.0%	55.0%	~0.5% (n=19)	96.7% (n=29 of 30)
University 3	84.0%	11.0%	33%	~28.6% (n=612)	3.6% (n=2 of 56)
University 4	81.0%	17.0%	35.0%	~15.6% (n=1,122)	5.7% (n=2 of 35)
University 5	64.0%	37.0%	22.0%	~53.9% (n=3,816)	95.7% (n=22 of 23)
University 6	55.0%	27.0%	21.0%	~45.9% (n=6,263)	1.7% (n=1 of 60)
University 7	55.0%	25.0%	28.0%	~31.9% (n=1,494)	8.5% (n=6 of 71)
University 8	87.0%	22.0%	36.0%	~18.3% (n=1,609)	n/a
University 9	62.0%	18.0%	47.0%	~14.1% (n=559)	14.8% (n=12 of 81)
University 10	85.0%	24.0%	33.0%	~25.6% (n=1,825)	0.0% (n=0 of 97)
University 11	68.0%	22.0%	25.0%	~8.7% (n=2,265)	0.0% (n=0 of 35)
University 12	66.0%	35.0%	41.0%	~15.0% (n=583)	49.0% (n=25 of 51)

Note. NCES = National Center for Education Statistics. The Pell Grant is a form of federal financial aid given to undergraduate students who demonstrate considerable financial need and is a part of "any grant or scholarship aid". NCES student financial aid data is unclear whether these figures include aid from the institution itself as well as federal aid. Graduate student percentages were calculated based upon the number of graduate assistants divided by the total number of graduate students listed by NCES for Fall 2023. Esports player scholarship data ($n = 598$) was obtained from the varsity player spreadsheets via the directors.

Retention and Graduation: Esports Players Planning on Staying at their University

Research Question:

- **What percentage of VOICE-affiliated collegiate esports players <u>plan on staying at their current university</u> until graduation?**

Results: 94.8% (*n* = 204) of the collegiate esports players plan to stay at their current university until they graduate, while 4.7% (*n* = 10) "don't know" and only 1 out of 215 (0.5%) do not plan to stay until graduation (Table 39).

Table 39. Collegiate Esports Players' Response to: "Do you plan to stay at your current university until you graduate?"

Yes	Don't Know	No
204 (**94.9%**)	10 (**4.7%**)	1 (**0.5%**)

Note. Data obtained from the esports player survey *(n = 215)*.

Retention and Graduation: Esports Program's Impact on Player Perceived Retention

Research Question:
- **What is the perceived impact of the competitive collegiate esports program on VOICE-affiliated collegiate esports players <u>planning to stay at or leave</u> their current university?** *[open response]*

Results: Out of 215 collegiate esports players, 53.5% (*n* = 115) feel that the esports program helps them to want to stay at their current institution until they graduate, while 46.5% (*n* = 100) perceive the esports program has no impact (Table 40).

Table 40. Regarding "Do you plan to stay at your current university until you graduate?" and "How has the esports program impacted your decision to stay at or leave your current university?" with Representative Player Quotes

Institution	Yes (Stay)		Don't Know		No (I plan to transfer or quit university)
	Esports Helps Me Want to Stay	No Impact from Esports	Esports Helps Me Want to Stay	No Impact from Esports	Esports Helps Me Want to Stay
University 1 (n = 10)	3	7			
	Esports Positive Impact: • *"[Esports] has made me more invested in my college."* (Stay) • *"The [esports] program makes me want to stay longer so I can keep playing on the team."* (Stay) • *"[The esports program] has made life more fun."* (Stay) Esports No Impact: • *"N/A since I am going to commit to graduate degree."* (Stay)				
University 2 (n = 18)	12	2	2	1	1
	Esports Positive Impact: • *"On a scale from 1 to 100, 100% because of the program I wish to stay and complete my degree."* (Stay) • *"Only reason I'm here."* (Don't Know) • *"Esports program is the reason I'm here for a little bit."* (No, Not Staying) Esports No Impact: • *"Don't know."* (Don't Know)				
University 3 (n = 20)	9	11			
	Esports Positive Impact: • *"[The esports program] has actually made me want to transfer from online to in person."* (Stay) • *"I was always passionate about the [esports] program, so it made me want to stay entirely."* (Stay) Esports No Impact: • *"It hasn't affected it. It is a lot of fun and a good social outlet, but overall, the academics is why I stay."* (Stay)				
University 4 (n = 26)	9	14		3	
	Esports Positive Impact: • *"[The esports program] has impacted to make me stay at the university because it's a perfect path and provides me an opportunity to get a career within the gaming and esports scene."* (Stay) • *[The esports program] created an environment that helped me settle quicker."* (Stay) • *"[The esports program] has motivated me to get accepted into the esports [academic] program."* (Stay) Esports No Impact: • *"[The esports program] hasn't affected me at all either way."* (Stay) • *"When things are going good, it is extremely fulfilling. When things aren't going well, it's tempting to go elsewhere."* (Don't Know)				
University 5 (n = 14)	6	7	1		
	Esports Positive Impact: • *"I've met great teammates that make me want to stay."* (Stay) • *"The esports program here has definitely made me want to stay here until I graduate."* (Stay) • *"If the esports program disappears, I might transfer to another school."* (Don't Know) Esports No Impact: • *"No impact. I plan to graduate regardless of esports."* (Stay)				

Institution	Yes (Stay)		Don't Know		No (I plan to transfer or quit university)
	Esports Helps Me Want to Stay	**No Impact from Esports**	**Esports Helps Me Want to Stay**	**No Impact from Esports**	**Esports Helps Me Want to Stay**
University 6 (n = 9)	3	6			
	Esports Positive Impact: • *"The Esports Program at University 6 has given me the chance to do what I love by competing at a high level while also giving me so many amazing networking and career opportunities as someone who wants to work in esports."* (Stay) • *"[The esports program helps me] want to stay more."* (Stay) Esports No Impact: • *"Fun but ultimately a non-factor."* (Stay)				
*University 7 (n = 22)	16	5		1	
	Esports Positive Impact: • *"I have invested in becoming a team lead and find joy in working with the team, so I have more motivation to stay."* (Stay) • *"[The esports program] is the reason why I'm here."* (Stay) • *"The people there are amazing and it makes me want to stay."* (Stay) Esports No Impact: • *"I plan to stay longer because of my academic scholarship."* (Stay)				
University 9 (n = 19)	12	6	1		
	Esports Positive Impact: • *"I have made some of the best friends I've ever had in Esports and that has encouraged me to give it my all at UND."* (Stay) • *"[The esports program] has impacted me to stay at this university. The community and atmosphere of the esports facility are great. If I wasn't on the team, I would probably transfer closer to home."* (Don't Know) Esports No Impact: • *"Not at all, just in for fun."* (Stay)				
University 10 (n = 57)	27	29	1		
	Esports Positive Impact: • *"[The esports program] is honestly the only reason I haven't transferred."* (Stay) • *"I love it! I might get my master's so I can continue at [University 10] eSports."* (Stay) Esports No Impact: • *"[The esports program] has not affected my experience to stay or leave the university."* (Stay)				
University 11 (n = 3)		3			
	Esports No Impact: • *"[The esports program] has not had any impact."* (Stay)				
University 12 (n = 17)	12	5			
	Esports Positive Impact: • *"Yes, if it was not for the esports program, I would have probably transferred to another university by now as I want to have a career in esports."* (Stay) • *"Huge. My [esports] director is the best!"* (Stay) Esports No Impact: • *"It has had no effect."* (Stay)				
TOTAL: (n = 215)	**109**	**95**	**5**	**5**	**1**
	Esports Helps Me Want to Stay (n = 115); 53.5%			**No Impact from Esports (n = 100); 46.5%**	

Note. *University 7 data includes two student responses who attend two different satellite institutions. "Stay" = planning on staying at university until graduation; "Don't Know" = unsure whether will stay at university until graduation; "No, Not Staying" = planning on not staying at university until graduation.

Retention and Graduation: Staying Because of Esports Academic Program

Research Question:
- **To what extent do VOICE-affiliated collegiate esports players <u>want to stay</u> their current university because of the esports academic courses/esports degree program?**

Results: A strong majority of VOICE-affiliated esports players (n = 150) reported that they do not take any academic esports courses at their university (Table 41). Of the remaining 66 students who do take academic esports coursework, 60% reported that the academic esports courses did not impact them wanting to stay at their current university. However, about 40% reported it had at least a little impact, including 13% responding that the academic esports program was the main reason for staying at their current university.

Table 41. *Esports Players' Perceived Impact of Staying Their Current University based on the Esports Academic/Degree Coursework*

Likert-style Question: Rate the following sentence according to the 4-point scale: "*My esports academic courses/degree program helps me want to stay at my current university*."	Count (*n*)	Percentage (%)
I do not take academic esports courses at my university.	150	
Students who do take academic esports coursework (n = 66)		
1 = Not at all	40	60.6%
2 = A little bit	10	15.2%
3 = Very much so	7	10.6%
4 = That is the main reason why I chose my current university	9	13.6%

Note. Data obtained from the esports player survey (n = 216).

Retention and Graduation: Student Body vs. Esports Player Retention Rates

Research Question:
- **Is the <u>retention rate</u> (i.e., student staying at their university and graduating) of VOICE collegiate esports players <u>greater</u> than the <u>retention rate</u> of the total student body?**

Results: On average, VOICE-affiliated esports program directors report an average esports player retention rate of 88.5% while institutions average 87.4% (Table 42). The accuracy of the director data is suspect, however, as some programs started recently (see demographics), and some directors may not precisely track this metric and may have "guessed" with their response. Only 5 of 12 esports programs report a retention rate higher than their institution's, but these data sets do not match the same timeframes precisely. On average, esports players self-report a 6.4% higher intention to stay rate compared to esports program directors' player retention rates.

Table 42. University Retention Rates vs. Esports Program Retention Rates alongside Player "Intention to Stay"

VOICE-affiliated Institution	University Retention Rates	Esports Program Director Reported Retention Rates	Esports Player Self-reported "Intention to Stay" Rates
University 1	98% *(*Fall 2022*)*	80%	100% (*n*=10)
University 2	85% (Fall 2024)	95%	77.8% (*n*=18)
University 3	90% (Fall 2022)	88%	100% (*n*=20)
University 4	90% (Fall 2023)	90%	88.5% (*n*=26)
University 5	94% (Fall 2023)	98%	92.9% (*n*=14)
University 6	86.8% (Fall 2023)	80%	100% (*n*=9)
University 7	80.7% (Fall 2023)	80%	95.5% (*n*=22)
University 8	87.3% (Fall 2023)	86%	*n/a*
University 9	83% (Fall 2023)	85%	94.7% (*n*=19)
University 10	88.9% (Fall 2022)	97% *(Spring 2024 to Fall 2024)*	98.2% (*n*=57)
University 11	96% (Fall 2023)	92.5%	100% (*n*=3)
University 12	69% (Fall 2022)	90%	100% (*n*=17)
Average:	**87.4%**	**88.5%**	**94.9%** (*n*=215)

Note. n/a = not available. Institution retention rate data was collected from each institution's Institutional Research Office website (or equivalent institution posted "facts" reports). Director data, which is suspect as some directors may not precisely track this metric, was provided by the director survey while player perception data was obtained from the player survey (*n* = 215). Transfer out-rate data provided by National Center for Education Statistics (NCES), corresponding to "full-time, first-time, degree/certificate-seeking undergraduates within 150% of normal time to program completion" for the 2017 cohort, revealed: University 1 (5%), University 2 (20%), University 3 (12%), University 5 (8%), University 6 (3%), University 9 (23%), and University 12 (28%); NCES data was not available for the other institutions.

Retention and Graduation: Graduation Rate

Research Question:

- **What is the average VOICE varsity esports player graduation rate <u>compared</u> to the average graduation rate of the total student body?**

Results: On average, VOICE-affiliated esports program directors report an average esports player graduation rate of 85.9% while the student body at these institutions average about 76% for the 6-year graduation rate (Table 43). The accuracy of the director data is suspect as some programs started recently (see demographics), and some directors may not precisely track this metric and may have "guessed" with their response. 10 of 12 esports programs report a graduation rate higher than their institution's, but these data sets do not match the same timeframes precisely.

Table 43. University Graduation Rates vs. Esports Program Graduation Rates

VOICE Institution	University Graduation Rate		Overall Graduation Rate (NCES, 2017 Cohort)	Esports Program Director Reported Graduation Rates
	4-Year Graduation Rate	**6-Year Graduation Rate**		
University 1	66.0%	93.0% *(Fall 2017 cohort)*	92.0%	99%
University 2	67.0%	72.0% *(Fall 2017 cohort)*	72.0%	90% *(removing the players that go pro)*
University 3	73.0%	81.8% *(Fall 2017 cohort)*	82.0%	96%
University 4	71.3%	81.0% *(Fall 2017 cohort)*	81.0%	90%
University 5	73.0%	85.0% *(Fall 2018 cohort)*	86.0%	94%
University 6	76.0%	91.4% *(Fall 2018 cohort)*	93.0%	100%
University 7	41.2%	64.3% *(Fall 2018 cohort)*	63.0%	90%
University 8	60.0%	66.1% *(Fall 2017 cohort)*	70.0%	86%
University 9	42.0%	63.0% *(Fall 2017 cohort)*	63.0%	48%
University 10	58.0%	75.3% *(Fall 2017 cohort)*	75.0%	90%
University 11	78.9%	92.0% *(Fall 2017 cohort)*	92.0%	98%
University 12	25.0%	48.0% *(Fall 2017 cohort)*	51.0%	50%
Average:	**61.0%**	**76.1%**	**76.7%**	**85.9%**

Note. NCES = National Center for Education Statistics. 4-year and 6-year graduation rate data were collected from each institution's Institutional Research Office website (or equivalent institution posted "facts" reports). NCES overall graduation rate data corresponds to "full-time, first-time, degree/certificate-seeking undergraduates within 150% of normal time to program completion" for the 2017 cohort. Esports program graduation rates obtained from the director survey.

Reasons to Play Collegiate Esports: Player Perceptions

Research Question:
- **What are the <u>main reasons</u> VOICE-affiliated collegiate esports players <u>play collegiate esports</u>?** *[open response]*

Results: Despite asking for a single main reason they play collegiate esports, many players listed more than one reason. The motivations for participating in collegiate esports primarily revolved around **competition**, having **fun**, and connecting with others in a **social community** (Table 44). **Financial incentives**, being part of a **team**, and **improving in esports** or **developing other skills** were also evident themes. Less common but still apparent themes related to "because I'm good at it" (10 responses), aspirations to become a professional esports player (8 responses), or to earn a degree (8 responses).

Table 44. Main Reasons VOICE-affiliated Esports Players Play Collegiate Esports

Theme	**Theme Description** *Collegiate esports players play collegiate esports…*	**Frequency Count**	**Representative Quote**
Competition	…for the thrill of competition or as a competitive outlet	71 *(35.1%)*	*"Intense love and passion of competition. If it wasn't for esports, I likely would have found a different vessel for it."* (University 12) *"I've always enjoyed the competitive aspect of gaming."* (University 10)
Fun & Enjoyment	…for pleasure as it is entertaining to them, with some referring to it as a passion	71 *(35.1%)*	*"I kinda just signed up for fun."* (University 6) *"To find new friends and have fun."* (University 10) *"It's fun and relives stress from class."* (University 6)
Community & Social Aspects	…to build friendships and be part of a supportive community	34 *(16.8%)*	*"Try out new things and meet new people."* (University 4) *"This is my first year, so I'm just testing the waters but because I wanted to meet others that were into the games I played."* (University 7)
Scholarship or Financial Benefits	…for financial benefits such as scholarships and tuition assistance	15 *(7.4%)*	*"Prize money and because I get a scholarship for doing so."* (University 2) *"Because of the partial scholarship and community."* (University 12) *"Free school + highest level of Overwatch competition."* (University 2)
Team Environment	…to be part of a team and/or support teammates	14 *(6.9%)*	*"To be on a team and learn how to play the game better."* (University 10) *"For the unique experience of playing in a team for collegiate esports."* (University 7)
Skill Development & Improvement	…to practice or refine their skills to get better at gaming or other related esports skills	12 *(5.9%)*	*"To get better at competitive play."* (University 10) *"To improve my personal and competitive skills."* (University 4) *"I want to develop as an esports player."* (University 7) *"To build communication and gaming skills."* (University 4)

Note. Data obtained from the player survey (*n* = 202).

Program Improvement: Player Perceptions

Research Question:
- **If VOICE collegiate esports players were in charge, what is the <u>single first thing they would do to IMPROVE</u> their competitive collegiate esports program?** *[open response]*

Results: As seen in Table 45, the most common suggestions for improving collegiate esports programs were offering more **scholarships**, **competitive development**, **marketing** the program better, increase **coaching and staff support**, increased **funding** (which likely relates to increased scholarships). Nearly 14% felt the program was already well-run or were unsure regarding any improvements. Less prevalent suggestions related to better **organization** or **communication** within the program, more **community building** and related **events** (with a few desiring more interaction between casual and competitive players), better **facilities** or **equipment**, more **university integration or support** (n = 11; 5.4%; e.g., athletics, Greek Life), and finding more **sponsorships** (n = 6; 3.0%). Table 46 provides analysis by institution.

Table 45. First Thing Collegiate Esports Players Would Do to Improve Their Collegiate Esports Program

<u>Theme</u>	<u>**Theme Description**</u> *The first thing collegiate esports players would do to improve their program is…*	<u>**Frequency Count**</u>	<u>**Representative Quote**</u>
Scholarships	…offer more esports scholarships to players	39 (19.3%)	*"Put more funding into finding players and coaches We don't have a ton of money for our program, so almost nobody is on scholarship who really deserves it."* (University 3) *"Provide all the players with scholarships rather than just the recruits since we all put in the same amount of work."* (University 4) *"Try to get the students more scholarships."* (University 7)
Competitive Development **Sub-theme:**	…focus more on competitive teams, including an increased emphasis on recruitment and competitive opportunities, as well as creating new JV or varsity teams	34 (16.8%)	*"Better scouting, more funding, and a serious focus on trying to reach new heights rather than just play 'for fun'."* (University 1) *"Give more options to play at a higher level."* (University 4) *"Motivate more players to join the teams so overall skill can be higher, making the teams more successful competitively."* (University 11)
Get More Serious or Stricter	…focus less on casual play and enforce more program rules	12 (5.9%)	*"Give scholarships to incentivize people to take it seriously."* (University 10) *"I would be stricter on rules in the facility we play at."* (University 9) *"Stricter rules for the arena so equipment isn't vandalized or stolen."* (University 5)
Marketing, Program Awareness, & Media Content	…better esports program publicity and marketing efforts, both on campus and online, which may attract new recruits or sponsors	31 (15.3%)	*"I would get a group of people to work on marketing for the esports program. I think that infographics and watch parties are great ways for the community to stay involved with the program, but only people who are already part of the community interacts with that. I would try to create content that the average non-esports affiliated college student would see on their feed and enjoy."* (University 7) *"Let it be more known that it exists and avidly stream and advertise our streams of our games for people to tune in."* (University 4) *"Improve our marketing: we could be doing so much more to market the program and engage with potential students/recruits. Not only could this lead to a larger recruitment pool for the program, but it would make us more valuable to the university as we get more high schoolers interested in coming to University 12."* (University 12)
Program is Already Well-Run or Unsure	…nothing, because they are satisfied with its current operation or don't know how to improve it	28 (13.9%)	*"I genuinely don't know because I think the esports program is amazing and is always improving in ways I couldn't think of."* (University 2) *"I think it's really good already."* (University 7) *"I'm not sure. I don't know how to run a program."* (University 10)

Coaching & Staff Support	…hire more esports staff and game-specific coaches	28 (13.9%)	*"Get coaches for each team."* (University 12) *…continued* *"Get game specific coaches."* (University 3) *"Provide scholarships to first team members, remove non-competitive players from the program, and hire coaches to improve."* (University 9)
Increased Funding	…greater financial support to improve areas such as scholarships, hiring staff and coaches, improved facilities, travel for competition, etc.	21 (10.4%)	*"More funding."* (University 1) *"Greater funding to travel and compete."* (University 3) *"I would advocate that the program gets more funding from the university to support the program and its players."* (University 6)
Better Organization or Communication	…improve the structure or communication surrounding the program, practices, and/or competitions	18 (8.9%)	*"I would change the whole system to make it be, and actually feel like, a community instead of just an organization made up of smaller groups that don't interact or connect with each other. There would be a lot of work to do."* (University 10) *"More interaction between the players throughout the semester."* (University 1) *"Streamline competitive practices among all varsity titles."* (University 4)
Community Building & Events	…facilitate community building within the program and host more in-person events	17 (8.4%)	*"More events for the esports teams."* (University 7) *"Improve divide between teams."* (University 12) *"Organize more events where all the members in the esports program collaborate more often."* (University 2)
Facilities & Equipment	…improve the esports facilities, equipment, or technology infrastructure	14 (6.9%)	*"Better internet."* (University 7) *"I would look to improve our facilities as soon as possible."* (University 12) *"Make a better lab and add a public space for people who are interested."* (University 2)

Note. Data obtained from the player survey (*n* = 202).

Institution	Sample Size	Top Themes and Frequency Count
University 1	8	• **Increased Funding** (4) • **Better Organization or Communication** (2)
University 2	18	• **Program is Already Well-Run or Unsure** (5) • **Facilities & Equipment** (5)
University 3	19	• **Coaching & Staff Support** (9) • **Increased Funding** (4)
University 4	24	• **Competitive Development** (7) • **Program is Already Well-Run or Unsure** (5) • **Scholarships** (5)
University 5	13	• **Competitive Development** (3) • **More University Integration (e.g., athletics, Greek Life) or Support** (3)
University 6	8	• **Scholarships** (4) • **Increased Funding** (3)
University 7	18	• **Program is Already Well-Run or Unsure** (4) • **Marketing, Program Awareness, & Media Content** (4)
University 9	18	• **Coaching & Staff Support** (8) • **Competitive Development** (4)
University 10	56	• **Scholarships** (18) • **Competitive Development** (11) • **Marketing, Program Awareness, & Media Content** (9)
University 11	2	• **Competitive Development** (1) • **More University Integration (e.g., athletics, Greek Life) or Support** (1) • **Better Organization or Communication** (1)
University 12	16	• **Marketing, Program Awareness, & Media Content** (5) • **Program is Already Well-Run or Unsure** (3) • **Facilities & Equipment** (3)

Note. Data obtained from the player's survey (n = 200); two students not included in this analysis were from satellite institutions.

Perceived Benefits of Collegiate Esports: Program Directors

Research Question:

- **What are the perceived benefits of collegiate esports, according to VOICE collegiate esports program directors?** *[open response]*

Results: The dominant themes indicate that the collegiate esports directors believe that collegiate esports fosters a sense of **community and belonging**, provides **personal and professional development opportunities**, serves as a **career pipeline into the esports industry**, and acts as a **student recruitment and retention** tool (Table 47). Additional benefits, as noted by a minority of collegiate directors, included that collegiate esports offers scholarships and financial incentives to help students pursue higher education, acts as an outlet for competition (especially for students who no longer participate in traditional sports), and offers a structured and sustainable alternative to the risky pipeline of becoming a professional esports player.

Table 47. Esports Directors' Perceived Benefits of Collegiate Esports

Theme	Theme Description *Collegiate esports as a way…*	Frequency Count	Representative Quote
Community & Belonging	…to create a strong sense of belonging and inclusivity	9	"*The ___ esports program primarily fosters a strong sense of community, bringing students together through shared interests.*"
Personal & Professional Development	…for skill-building in teamwork, communication, leadership, and industry-related competencies	8	"*Students learn important life skills, teamwork, leadership, communication, conflict management and resolution.*"
Career Pathways & Industry Preparation	…to serve as a pipeline to careers in esports, gaming, and adjacent industries	7	"*By leveraging industry partnerships and offering hands-on experiences, the program connects students with career pathways in the rapidly growing gaming and technology sectors.*"
Recruitment, Retention, & Student Engagement	…to attract and retain students who may not otherwise engage with traditional university activities.	6	"*Without [collegiate esports], many students would struggle to share their passions. On the school's side, this aids in the recruitment and retention of players.*"

Note. Data obtained from the esports director survey (n = 12).

Perceived Benefits of Collegiate Esports: Program Staff

Research Question:
- **What are the <u>perceived benefits</u> of collegiate esports, according to VOICE-affiliated collegiate esports <u>staff (non-directors)</u>?** *[open response]*

Results: The primary perceived benefits of collegiate esports, as noted by esports staff, revolved around **community building**, **student engagement**, **career development**, and **skill acquisition** (Table 48). A minority of esports staff also felt that collegiate esports provide an alternative competitive environment for students, helps with scholarships and access to higher education, offers networking and career pathways, and benefits universities through increased student engagement, recruitment, and new alumni connections.

Table 48. Esports Staff's Perceived Benefits of Collegiate Esports

Theme	Theme Description *Collegiate esports…*	Frequency Count	Representative Quotes
Community & Social Connection	…fosters a sense of belonging, builds friendships, and connects like-minded individuals	11	*"Fostering a sense of community by connecting like-minded individuals who share a passion for gaming."* *"Provides an opportunity for students to build community and compete around a common interest."*
Student Engagement & Inclusion	…provides an avenue for student involvement, including those who may not have engaged in traditional extracurricular activities	7	*"Esports create new avenues for student involvement, promote diversity and inclusion."* *"Creates an avenue of engagement for students interested in competition through video games."*
Career Development & Industry Opportunities	…helps students gain skills that are transferable to professional careers in esports, tech, and other industries	6	*"Opens doors to careers in gaming, tech, and related industries."* *"A great opportunity to build skills and experience in a growing industry in a field that has a lot of fans."*
Skill Development	…facilitates students in gaining both technical skills and essential soft skills like teamwork, leadership, and communication	6	*"Helps develop both hard skills, like strategic thinking and hand-eye coordination, and soft skills, such as teamwork, communication, and leadership."* *"Competitive environments are also incredibly important in developing life skills and learning how to work in team environments."*

Note. Data obtained from the esports staff survey (*n* = 13).

Perceived Benefits of Collegiate Esports: Players

Research Question:

- **What are the perceived benefits of collegiate esports, according to VOICE-affiliated collegiate esports players?** *[open response]*

Results: The most commonly cited benefits of collegiate esports by players revolve around **community** (including interacting with "like-minded" people), **competition**, **personal growth** and **life skill development**, **teambuilding**, **scholarships**, **networking**, **esports skill development**, and having **fun** (Table 49). Less mentioned benefits included **staff or university support/resources**, **earning a degree**, **travel opportunities**, and a **path to professional esports** or a way to **extend a professional esports playing career**.

==*Table 49. Esports Players' Perceived Benefits of Collegiate Esports*==

Theme	**Theme Description** *Collegiate esports players perceive that collegiate esports…*	**Frequency Count**	**Representative Quote**
Community & Friendship **Sub-theme:**	…fosters a sense of belonging, builds friendships, and creates a supportive community	111 *(55.0%)*	*"The benefits of collegiate esports overall is allowing members of a community that have a shared interest in a certain game to come together and work towards a shared goal of progressing, growing as a team, and overall experiencing a competitive experience while still a student."* (University 4) *"I think the main [benefit] for me is the community. It doesn't matter who you are, everyone is welcome."* (University 10) *"Collegiate esports gives you an amazing community of people that share common interests with you. It also allows you to be on a high level competitive team where you are able to form life long bonds with your teammates."* (University 6)
Culture of Like-minded People	…offers a unique culture of "like-minded" people	34 *(16.8%)*	*"Having like-minded people who are into video games as much as you are. The possibility of getting scholarships. Having the opportunity to further the esports career path."* (branch campus of University 7) *"It has brought me friends that understand me and what I love."* (University 10) *"Learning leadership, teaching people to take things seriously, and meeting like-minded people are probably the biggest things to me."* (University 12)
Competition	…provides a competitive environment and an outlet for competition	55 *(27.2%)*	*"Gaining an education while being able to compete at the top level in your respective game."* (University 2) *"It brings great competition between universities. It opens up different careers to students, regardless whether the program is student or university led. It allows for great connections between universities."* (University 12) *"Community and the competition aspect. I love to compete."* (University 10)
Personal Growth & Life Skill Development	…facilitates growing as a person and nurtures life skills (e.g., leadership, time management, communication)	43 *(21.3%)*	*"Builds character and allows individuals to develop leadership skills while also coordinating with other students to create meaningful plans."* (*University 5*) *"It grants you the ability to learn from your mistakes and bounce back even stronger."* (University 12) *"It has given me a community of people to spend time with. It has helped me work on my time management skills."* (University 10)
Team Environment, Teamwork, & Team Skill Building	…offers a desired team environment that facilitates teambuilding and teamwork skills	41 *(20.3%)*	*"It creates a great community to be involved in; my team is like my family."* (University 12) *"Community, encourages player growth, teambuilding."* (University 1) *"Building genuine teamwork for real life is very important. It's also a good stress release."* (University 3) *continued…*

...continued

Theme	**Theme Description** *Collegiate esports players perceive that collegiate esports…*	**Frequency Count**	**Representative Quote**
Scholarships & Financial Rewards	…affords scholarships and the opportunity to win prize money	34 *(16.8%)*	*"Scholarship and connections with people."* (University 4) *"Scholarship, education opportunities, and high-level competition."* (University 11) *"The benefits of collegiate esports is a scholarship and being able to be in an in-person environment."* (University 2)
Networking & Career Opportunities	… leads to networking and potential career opportunities	30 *(14.9%)*	*"For sim racing it's helped me network with companies and businesses in sponsorship meetings and such. It's also helped me connect with internships and future job opportunities."* (University 10) *"Puts your name out there for professional esports. Opportunities for LANs and talking to professional teams. And gives you something to do at college."* (University 12) *"Teambuilding, new connections, new friends, potential esports industry connections."* (University 11)
Esports Skill Development	…helps players improve at playing their game	30 *(14.9%)*	*"For me, having collegiate esports helps to connect with the wider community of people who like the same game that you do. It also helps me get better at the game I play as well as helping to make me a calmer, more rational character."* (University 10) *"I get to play the game I enjoy with people who also want to get better, and I get to hang out and improve at the game with these people."* (University 3)
Fun, Enjoyment, or Satisfying a Passion for Gaming	…is fun, even fulfilling their "love" of video gaming	30 *(14.9%)*	*"You get to meet new people doing something you all enjoy."* (University 4) *"Getting to do one of the things I love to do on a competitive level."* (University 10) *"Fun hobby that helps you meet people who share a similar interest."* (University 6)
Staff or University Support & Resources	…affords esports staff support, access to equipment and facilities, and student perks like priority class registration	20 *(9.9%)*	*"Gamers can be treated like athletes."* (University 9) *"New friends and playing on top consoles." (*University 10*)* *"We have a really nice facility with computers that are more than capable of running the required titles. We get priority registration which means I get the classes and professors that I want. I also get to meet new people from all around the nation and build an online community with people that have shared interests and can lead to possible work connections."* (University 9) *"Full support system alongside education."* (University 2)
Get an Education	…earn a degree while playing esports	15 *(7.4%)*	*"My grades have improved due to grade requirements, and I've made a few friends in the program."* (University 10) *"They give you an opportunity to create connections to similar people along with improving academic success."* (University 9) *"Being able to get an education while chasing pro."* (University 2)
Travel Opportunities	…provides travel opportunities for competitions, often free to players	13 *(6.4%)*	*"I get to travel to awesome places to play my favorite game and I get to hang out with some of my favorite people. The esports rooms on campus are also a very nice bonus."* (University 3) *"Traveling around and experiences different things I wouldn't have. Also, the people in the program help me branch out."* (University 2)
Path To, or an Extension of, a Pro Esports Playing Career	…offers a "path to pro", or a way to extend a professional esports playing career	8 *(4.0%)*	*"It has given me the opportunity to live in America, study for free, and make money in another league (the college league) whilst balancing my pro career."* (University 2) *"It can extend your esports career."* (University 5) *"Learn how to play with a team, some networking, career paths, scholarships, and start of people's pro esports careers."* (University 7)

Note. Data obtained from the esports player survey (*n* = 202).

Perceived Player Gains from Collegiate Esports: Program Directors

Research Question:
- **What do VOICE collegiate esports program directors perceive their players gain from their university having a competitive collegiate esports program?** *[open response]*

Results: The most frequently mentioned benefits students gain from collegiate esports, as perceived by the collegiate esports directors, were **community and a sense of belonging**, **personal development** (i.e., teamwork, communication, leadership, and life skills), and **career preparation opportunities** (Table 50). Additional minority benefits themes included access to structured competitive opportunities, scholarships and financial support, and mental health and wellness benefits.

Table 50. Esports Directors' Perceptions regarding what Students/Players Gain from the University having an Esports Program

Theme	Theme Description	Frequency Count	Representative Quote(s)
Community & Sense of Belonging	Students gain a strong social network, friendships, and a supportive environment	9	*"A home away from home, a community that shares your interests and is safe for all walks of life."* *"Our students also benefit from a supportive and inclusive community where they can build lasting friendships."*
Personal Development	Provide opportunities for students to grow in key interpersonal and leadership skills	8	*"Students learn teamwork, communication, and game theory."* *"[Players gain] leadership qualities, communication skills, [and] teamwork."*
Career Preparation & Industry Opportunities	Pathways to careers in gaming, technology, media, and esports-related fields.	7	*"Pathways to careers in esports, broadcasting, technology, and other related fields."* *"Our players go through transformational experiences and deeply understand what it takes to become a contributing member of the professional [esports] ecosystem."*

Note. Data obtained from the esports director survey (*n* = 12).

Perceived Player Gains from Collegiate Esports: Program Staff

Research Question:
- **What do VOICE collegiate esports program staff (non-directors) perceive their players gain from their university having a competitive collegiate esports program?** *[open response]*

Results: The most frequently mentioned player benefits of collegiate esports, as noted by esports staff, are **community and social belonging**, **personal and professional skill development**, **scholarships** and **academic support**, along with **intercollegiate competition** and **travel opportunities** (Table 51). Lower themes that were revealed were support from the university through administration, faculty, and esports staff, as well as career and networking opportunities through building industry connections while exploring career paths in gaming, content creation, and technology.

Table 51. Esports Staff's Perceptions regarding what Students/Players Gain from the University having an Esports Program

Theme	**Theme Description** *Collegiate esports programs…*	**Frequency Count**	**Representative Quotes**
Community & Social Belonging	…provide a strong sense of community, a space to connect, and friendships	10	*"Students can find a strong, supportive community of peers who share their passion, fostering friendships and collaboration."* *"[Collegiate esports players gain] structure, community, teammates, and validation of their passion and work."*
Personal & Professional Development	…aid students in gaining soft and hard skills that help them in both academics and careers	7	*"Players learn transferable skills that will benefit them in the workplace, such as teamwork, communication, critical thinking, time management, and problem-solving skills."* *"[Collegiate esports] equips them with valuable skills, such as strategic thinking, teamwork, and communication, which are essential for both personal and professional growth."*
Scholarships & Academic Support	…provide students financial assistance and university-backed academic support	5	*"The university supports the students through scholarships, facilities, and travel opportunities."* *"Scholarships for players, support for classes, great community with similar interests."*
Competitive & Travel Opportunities	…offer students opportunities to engage in intercollegiate competition and travel for tournaments	5	*"Players get access to intercollegiate competition and travel opportunities."* *"Opportunity to travel to tournaments and events, opportunity to meet with professionals in the space on a 1-on-1 level."*

Note. Data obtained from the esports staff survey (*n* = 13).

Perceived Personal Player Gains from Collegiate Esports: Players

Research Question:

- **What do VOICE-affiliated collegiate <u>esports players perceive</u> that they <u>personally gain</u> from their university having a competitive collegiate esports program?** *[open response]*

Results: As seen in Table 52, collegiate esports players perceive they personally gain from their university having a competitive collegiate esports program through it offering **community and friendships**, a **competitive outlet** and a **platform to showcase their skills**, **enjoyment** and **stress relief**, personal growth, a desired **team environment**, **esports skill development**, **scholarship and financial rewards**, a **support system**, **an opportunity to earn a degree and boosts a résumé**, and affords **job and networking opportunities**. Moreover, a small minority of players noted they personally gain from their university having a competitive esports program by being able to take esports "to the next level" (i.e., from high school to collegiate), the ability to represent their university on a national level, added motivation, travel opportunities, a reason to be in-person on campus, and it affords an added extra-curricular activity. About five percent reported **no personal gains**.

Table 52. Esports Players' Perceptions regarding what They Gain from the University having an Esports Program

<u>Theme</u>	<u>Theme Description</u> *From universities having a collegiate esports program, players gain…*	<u>Frequency Count</u>	<u>Representative Quotes</u>
Community & Friendships	…opportunities to meet a community of like-minded individuals while forming lasting friendships	87 *(43.1%)*	*"Provides a community of like-minded students; helped me become friends with many of the people I know today."* (University 3) *"I gain a safe place to go hang out with friends and a sense of belonging when playing."* (University 9) *"It is an introverts personal haven to act as an extrovert does primarily."* (University 10)
Competition & Skill Display Platform	…an outlet for competition and platform to display esports skills	53 *(26.2%)*	*"Scratching my itch for competition."* (University 10) *"Gaining an experience only people can dream of; being able to travel and compete at my games' highest level is an honor."* (University 2) *"Allows me to display my talent."* (University 10)
Enjoyment & Stress Relief	…enjoyment and a way to relieve stress	32 *(15.8%)*	*"Networking and Fun."* (University 1) *"I get to have fun playing competitive games."* (University 4) *"Friends and a good stress relief."* (University 3)
Personal Growth & Overall Experience	…personal growth, overall experience, and life skills such as leadership experience and communication skills	31 *(15.3%)*	*"I really love the community at my college. Joining my Esports team has given me a place to belong on campus, and I have made several of my friends through competition. Playing a very team-focused game has also sharpened my communication abilities since I use them so much in play."* (University 10) *"Coaching, life skills, connections."* (University 6) *"I gain valuable experience in leading a team, as well as experience on playing on a worldwide level."* (University 10)
Teammates & Team Experience	…the benefits of playing with teammates in a team setting	30 *(14.9%)*	*"Something to do with people who are similar to me. Having a group and winning with that group is the best feeling ever."* (University 3) *"I have the opportunity to experience the game through a team and learn from better players. At the same time, it gives me the opportunity to even think about a future in esports."* (University 1) *"Being able to compete in Omega strikers for my university, meeting my teammates and having team and individual success."* (University 6)
Esports Game Knowledge & Esports Skill Development	…esports game knowledge and esports skills while demonstrating improvement at the game	26 *(12.9%)*	*"A strong support group and social circle, and motivation to improve in academics and my esports title."* (University 3) *"I've been able to find people similar to me that have been able to keep me on track and improve."* (University 9) *"Ability to get better at the game and meet new people."* (University 10)

Theme	Theme Description *From universities having a collegiate esports program, players gain…*	Frequency Count	Representative Quotes ...continued
Scholarship & Financial Benefits	…scholarships, tuition assistance, or financial benefits	25 *(12.4%)*	*"Free everything."* (University 2) *"I gain a dedicated esports arena, school support, scholarship, and academic assistance (if ever needed)."* (University 5) *"Getting to go to events that the university pays for."* (University 3)
Support System	…a support system including esports staff, facilities, and structure, with some saying it simulates being a pro player	22 *(10.9%)*	*"I gain a scholarship and a great opportunity to see what it would be like to be a pro player, and I gain an amazing support team from the staff."* (University 2) *"A support system to compete [within], as well as a community to hang out with."* (University 5) *"They support me and my team. I feel a lot more confident racing now than I did freshmen year. I now have more support than ever and its great motivation."* (University 10)
Education & Résumé Builder	…the ability to pursue a degree and enhance their résumé	15 *(7.4%)*	*"I really enjoy being able to still play competitively while pursuing a degree, while also fostering my social relationships with my club and teammates."* (University 5) *"Resume boost."* (University 3) *"I gain a resume boost due to being a team captain, and enjoyment from the competition."* (University 10)
Career & Networking Opportunities	…impact on future career paths and esports industry connections.	14 *(6.9%)*	*"Trying to get a job in esports is extremely hard; it's a very competitive area. Having a venue where I can meet connected people and gain experience is the only way I see myself making a living while still being involved in the community. Plus, I love competing, and I love the fact that I can do it for my school in a field I'm good at."* (University 7) *"Participating in various opportunities, building my resume, learning new stuff in the esports and gaming scene constantly and setting myself up for a good career in the industry."* (University 4) *"It has helped me make friends, gain connections to jobs, and helped me gain confidence."* (University 5)
Nothing Gained or No Benefit	…nothing or no real personal benefit.	10 *(5.0%)*	*"It's hard to say that I gain anything personally from this."* (University 10) *"Nothing."* (University 9) *"Nothing."* (University 6)

Note. Data obtained from the esports player survey (*n* = 202).

Perceived University Gains from Collegiate Esports: Program Director

Research Question:
- **What do VOICE collegiate esports program directors perceive their university gains from having a competitive collegiate esports program?** *[open response]*

Results: The most frequently cited benefits universities gain from an esports program, as perceived by the program directors, were **student recruitment and retention**, **enhanced student engagement**, and **increased marketing and visibility** (Table 53). Additionally, a minority of directors noted that esports serve as a source of sponsorship and revenue, fosters academic innovation and research, and enhances community and industry engagement.

Table 53. Esports Directors' Perceptions regarding what the University Gains from having an Esports Program

Theme	Theme Description *Esports as a tool…*	Frequency Count	Representative Quote(s)
Student Recruitment & Retention	…for attracting and keeping students, particularly those seeking a sense of belonging	8	*"Recruitment and more importantly retention. Many students find a home in esports/gaming."*
Student Engagement & Campus Involvement	…to provide meaningful engagement opportunities for students, fostering a vibrant campus culture	7	*"The university gains a very proven and effective student engagement tool."* *"A way to interact with more students on campus."*
Marketing, Branding & Institutional Visibility	…to enhance a university's reputation, visibility, and brand awareness.	6	*"The notoriety of esports here has been transformational for the school."* *"More recognition from a field that they aren't really advertising."*

Note. Data obtained from the esports director survey (*n* = 12).

Perceived University Gains from Collegiate Esports: Program Staff

Research Question:
- **What do VOICE collegiate esports <u>program staff (non-directors) perceive</u> their university gains from having a competitive collegiate esports program?** *[open response]*

Results: The most commonly cited benefits to universities of having a collegiate esports program, as cited by esports staff, are **student recruitment and retention**, **university recognition**, **community engagement**, and **industry collaborations** (Table 54). A minority of esports staff also noted that collegiate esports programs offer universities sponsorship opportunities, enhance on-campus student engagement, and fosters diversity and inclusion for gamers who are sometimes not valued by society.

Table 54. Esports Staff's Perceptions regarding what the University Gains from having an Esports Program

Theme	**Theme Description** *Collegiate esports programs…*	**Frequency Count**	**Representative Quotes**
Student Recruitment & Retention	…attract students, retain them through engagement, and serve as a unique selling point	8	*"Our university gains an addition to the student population, not only from local players but from out-of-state players as well."* *"Most of our students share that we were their top choice over other high-ranking schools solely because of our [esports] program."*
University & Esports Industry Recognition	…enhance the university's reputation, provides visibility, and gains media attention	7	*"The [esports] program strengthens our institution's reputation as innovative and forward-thinking."* *"We gain recognition and are a marketing tool for our university to use."*
Community Engagement & Outreach	…connect the university with local schools, industries, and broader communities	6	*"We contribute to the footprint in the community by visiting high schools and middle schools, as well as hosting summer camps."* *"[The university gains] better outreach to high schools."* *"Our [esports] spaces allow and encourage students to leave their dorms and go out and meet other individuals in the space."*

Note. Data obtained from esports staff survey (*n* = 13).

Perceived University Gains from Collegiate Esports: Players

Research Question:

- **What do VOICE-affiliated collegiate <u>esports players perceive</u> that their university gains from having a competitive collegiate esports program?** *[open response]*

Results: Esports players perceive that collegiate esports enhance the university's **publicity and recognition**, **student recruitment**, **student engagement**, **prestige with competitive success**, **financial and sponsor opportunities**, and **career and skill development** (Table 55). A small minority of students were uncertain (n = 13; 6.4%) or listed "nothing" or a negative impact (*n* = 3; 1.5%), while 11 students (5.4%) felt the university gained networking and external collaboration opportunities through esports.

Table 55. Esports Players' Perceptions regarding what the University Gains from having an Esports Program

Theme	**Theme Description** *From having a collegiate esports program, universities gain…*	**Frequency Count**	**Representative Quotes**
Publicity & Recognition	…exposure, national recognition, and increased visibility	86 *(42.6%)*	*"Increased brand name recognition and reputation."* (University 2) *"More eyes on the university."* (University 4) *"International recognition."* (University 7)
Recruiting Tool	…a recruitment and enrollment tool to attract new students	56 *(27.7%)*	*"Encourages people to come to University 3i if they can get a scholarship or if they can join the team; while I didn't come here mainly for esports, it was a factor, and I know people who did come here for mostly esports. It fosters a community of people who have similar interests and passions."* (University 3) *"Publicity from the respective gaming communities seeing us at the top year after year. As well as creating an environment where people from outside might want to come and join University 2 just for the program alone."* (University 2) *"Our university gains in-state and out-of-state students and transfers that otherwise would not have come here, and national recognition from competitions."* (University 12)
Community Building & Student Engagement **Sub-theme:**	…student engagement, retention, and students' sense of belonging among students who may not engage in traditional sports or clubs	55 *(27.2%)*	*"Having a community of like-minded individuals who bond over video games and enhance their experience at the university, as well as represent the university in front of different audiences."* (University 6) *"Allows students into esports to have a place at school, and that grows a community which becomes filled with lots of great people, that you can talk to and learn from."* (University 7) *"Students are encouraged to interact with the club and social life at my university because of the esports teams, and it encourages people to apply or come to the university."* (University 3)
Diversity & Inclusion	…students who perceive a greater sense of inclusivity and diverse opportunities afforded to them	13 *(6.4%)*	*"Lots of different variety of people that have more of an uncommon interest accommodated for and acknowledged."* (University 7) *"Greater feeling of inclusiveness and being a pioneer in a new industry for colleges."* (University 10) *"Our university gains more notability as we compete in various different tournaments for them. It also is another amazing run student club on campus that students can join and feel welcomed in."* (University 6)

Theme	Theme Description *From having a collegiate esports program, universities gain…*	Frequency Count	Representative Quotes *...continued*
Prestige with Competitive Esports Success	…enhanced university reputation on a national stage when the esports program is successful or wins awards	44 (21.8%)	*"I think they gain the prestige of being the best esports program which could bring in more students and get more funding possibly."* (University 2) *"Recruiting and notoriety from our success."* (University 9) *"Larger reach; while a state school, many out-of-staters likely have not heard of University 12. By playing schools from across the country and by winning at a national level, it is possible to increase awareness of the institution. Locally, many students are drawn to University 12 because of the esports program, whether or not they would actively compete."* (University 12)
Financial Benefits & Funding	… gain revenue and financial support, primarily through sponsorships and tuition from students interested in esports	23 (11.4%)	*"Fame, attention, and possibly more funding if the esports program is successful."* (University 1) *"Publicity and exposure. For Sim Racing it's also the only esport where you can actually represent your partners/sponsors. We can put their logos on our cars; we can't put logos on players in other games. We can sell ad space on a billboard."* (University 10) *"My university gains exposure for new students as well as sponsorships to help them fund the school."* (University 2)
Career & Skill Development	…a tool to develop skills and career pathways in gaming and technology	15 (7.4%)	*"It benefits mainly from student engagement from a niche of people (gamers) and overall improve the development of skills in a focused esports program."* (University 4) *"Attention and promotes people to the industry in esports."* (University 5) *"Broader club sports program. Also provides opportunities for things like broadcasting clubs. Enhances student experience."* (University 6)

Note. Data obtained from esports player survey (*n* = 202).

Top 5 Benefits of Collegiate Esports: Program Directors and Staff

Research Question:

- **According to VOICE collegiate <u>esports program directors and staff,</u> what are the top 5 selected benefits of collegiate esports?** *[from a pre-determined list]*

Results: A pre-determined list of 32 different potential student benefits of collegiate esports participation based on prior literature were provided across areas relating career/academic skills, personal development/well-being, physical health/abilities, and social/interpersonal skills, as well as an open-response option to report something not on the list. Respondents were permitted to select their top 5 areas only. As seen in Table 56, the five most frequently selected areas by the VOICE-affiliated esports directors were communication skills, teamwork skills, problem-solving skills, time-management skills, and sense of belonging, while the top benefits selected by esports staff were communication skills, building skills for a future career, ability to develop friendships, time-management skills community building, and teamwork skills. Of note, this question was displayed last, so respondents were not influenced by this list when responding to similar open-response "benefits" questions.

Table 56. Esports Directors' and Esports Staff's Perceived Top 5 Areas that Benefit Students the Most from Collegiate Esports Participation

Perceived Collegiate Esports Participation Benefits Area (*Alphabetical*)	Esports Directors (*n*=12)		Esports Staff (*n*=13)	
	Count (*n*)	Percentage (%)	Count (*n*)	Percentage (%)
Ability for Commitment/Persistence	3	25.0	2	15.4
Ability to Concentrate/Focus	0	0.0	1	7.7
Ability to Develop Friendships	1	8.3	*5	38.5
Ability to Regulate Emotions	2	16.7	2	15.4
Academic Performance	3	25.0	2	15.4
Accountability	1	8.3	0	0.0
Building Skills for a Future Career	2	16.7	*7	53.8
Communication Skills	*9	75.0	*7	53.8
Community Building	3	25.0	*4	30.8
Creativity	0	0.0	1	7.7
Develop School Pride	0	0.0	2	15.4
Earning Recognition	1	8.3	2	15.4
Feeling of Well-being	0	0.0	2	15.4
Improved Self-confidence	3	25.0	2	15.4
Leadership Skills	4	33.3	3	23.1
Multi-cultural Awareness	1	8.3	0	0.0
Physical Strength	0	0.0	1	7.7
Problem-solving Skills	*7	58.3	3	23.1
Teamwork Skills	*8	66.7	*4	30.8
Technology Skills	0	0.0	3	23.1
Time-management Skills	*6	50.0	*5	38.5
Respect for Others	1	8.3	2	15.4
Sense of Accomplishment	1	8.3	1	7.7
Sense of Belonging	*5	41.7	3	23.1
Stress Management	0	0.0	1	7.7
Weight Control	1	8.3	0	0.0

Note. * = top 5 most prevalent director/staff response. Data obtained from the director survey and staff survey.

Top 5 Benefits of Collegiate Esports: Players

Research Question:

- **According to VOICE collegiate esports <u>players</u>, what are the top 5 selected benefits of collegiate esports?** *[from a pre-determined list]*

Results: A pre-determined list of 32 different potential student benefits of collegiate esports participation based on prior literature were provided across areas relating career/academic skills, personal development/well-being, physical health/abilities, and social/interpersonal skills, as well as an open-response option to report something not on the list. Respondents were permitted select the top 5 areas only. As seen in Table 57, the five most frequently selected areas by the VOICE-affiliated esports players were communication skills (44%), teamwork skills (33%), ability for commitment/persistence (31%), leadership skills (31%), and problem-solving skills (31%). Of note, this question was displayed last, so respondents were not influenced by this list when responding to similar open-response "benefits of esports" questions.

Table 57. Esports Players' Perceived Top 5 Areas that Benefit Them the Most from Participating in Collegiate Esports

Perceived Collegiate Esports Participation Benefit Area (*ordered by frequency count*)	Count (*n*)	Percentage (%) (*n = 990 areas*)	Percentage of Players who Rated Area in Top 5 (*n = 198*)
Communication Skills	88	8.9%	44.4%
Teamwork Skills	66	6.7%	33.3%
Ability for Commitment/Persistence	62	6.3%	31.3%
Leadership Skills	62	6.3%	31.3%
Problem-solving Skills	62	6.3%	31.3%
Reaction Time	59	6.0%	29.8%
Ability to Concentrate/Focus	52	5.3%	26.3%
Hand-eye Coordination	52	5.3%	26.3%
Sense of Accomplishment	49	5.0%	24.8%
Ability to Develop Friendships	48	4.9%	24.2%
Improved Self-confidence	36	3.6%	18.2%
Sense of Belonging	36	3.6%	18.2%
Time-management Skills	35	3.5%	17.7%
Ability to Multi-task	34	3.4%	17.2%
Ability to Regulate Emotions	34	3.4%	17.2%
Respect for Others	22	2.2%	11.1%
Stress Management	22	2.2%	11.1%
Earning Recognition	20	2.0%	10.1%
Technology Skills	19	1.9%	9.6%
Building Skills for my Future Career	18	1.8%	9.1%
Community Building	18	1.8%	9.1%
Creativity	17	1.7%	8.6%
Academic Performance	13	1.3%	6.6%
Athletic Ability	13	1.3%	6.6%
Develop School Pride	11	1.1%	5.6%
Feeling of Well-being	10	1.0%	5.1%
Other (unspecified)	7	0.7%	3.5%
Study Habits	6	0.6%	3.0%
Multi-cultural Awareness	5	0.5%	2.5%
Physical Strength	5	0.5%	2.5%
Physical Endurance	3	0.3%	1.5%
Sleep Quality	3	0.3%	1.5%
Weight Control	2	0.2%	1.0%
"None"	1	0.1%	0.5%

Note. Data obtained from the esports player survey (*n* = 198; top 5 each = 990 total responses).

Perceived Skills Learned and Development from Collegiate Esports: Program Directors

Research Question:

- **According to VOICE collegiate esports <u>program directors</u>, what are the skills they perceive their players have learned and developed from collegiate esports?** *[open response]*

Results: The most frequently cited skills developed through collegiate esports, as perceived by esports program directors, include **communication**, **teamwork**, **time management**, and **leadership** skills (Table 58). Other themes noted by the directors were that collegiate esports develops conflict resolution, mental resilience, hands-on project and event management experience, and technical industry skills such as broadcasting, video production, IT, and marketing, that prepare them for professional opportunities beyond gaming.

Table 58. Esports Directors' Perceptions regarding what Skills their Students/Players Learned and Developed from Collegiate Esports Participation

Theme	Theme Description *Players learn and develop…*	Frequency Count	Representative Quote(s)
Communication Skills	…strong communication abilities, including interpersonal, professional, and team-based communication	10	*"Effective communication and collaboration are at the core of their experiences."* *"[Players learn and develop] intricacies in communication."*
Teamwork & Collaboration	…the ability to effectively work collaboratively in teams	10	*"Teamwork, empathy, and communication are the most important player development pillars."* *"[Players learn and develop] collaboration, networking, and problem-solving."*
Time Management & Organization	…their ability to manage time, balance responsibilities, and stay organized	7	*"[Players learn and develop] time management, study skills, event planning and scheduling."* *"[Players learn and develop] time management, conflict resolution, communication, teamwork, and mental health tools."*
Leadership & Accountability	…leadership experience and take ownership of responsibilities	6	*"[Players learn and develop] leadership, adaptability, and strategic thinking."* *[Players learn and develop] leadership, communication, teamwork, and goal setting."*

Note. Data obtained from the esports director survey (*n* = 12).

Perceived Skills Learned and Development from Collegiate Esports: Program Staff

Research Question:
- **According to VOICE-affiliated collegiate esports <u>staff (non-directors)</u>, what are the <u>skills</u> they perceive their players have learned and developed from collegiate esports?** *[open response]*

Results: The most frequently developed skills in collegiate esports, as perceived by esports staff, were **communication**, **interpersonal skills**, **teamwork**, **time management**, **problem-solving**, **critical thinking**, and **leadership skills** (Table 59). Additionally, some esports staff also felt that collegiate esports provides players media and event production experience, career networking opportunities, hands-on technical skills, and cultivates adaptability and resilience, preparing them for real-world challenges.

Table 59. Esports Staff's Perceptions regarding what Skills their Students/Players Learned and Developed from Collegiate Esports Participation

<u>Theme</u>	<u>**Theme Description**</u> *Collegiate esports helps players…*	<u>**Frequency Count**</u>	<u>**Representative Quotes**</u> *Collegiate esports helps players learn and develop…*
Communication & Interpersonal Skills	…develop high-level communication skills in team environments, high-pressure situations, and professional settings	9	*"...high levels of communication in a fast-paced, stressful situation."* *"...conflict resolution, communication, teamwork, and strategy."* *"...interpersonal communications, as well as providing and receiving constructive criticism."*
Teamwork & Collaboration	…foster strong teamwork abilities, including coordination, collaboration, and adaptability	8	*"...sportsmanship and team cohesion that will travel with them into work environments."* *"...soft skills in the workplace (teamwork, collaboration), self-discipline, and persistence."*
Time Management & Prioritization	…learn to balance academics, gaming, and extracurricular responsibilities effectively.	6	*"...time management while pursuing self-improvement at something very difficult."* *"...planning, teamwork, scheduling, and prioritization."*
Problem-Solving & Critical Thinking	…develop the ability to analyze complex situations, make quick decisions, and adapt to challenges	6	*"...[the ability to] overcome adversity and be flexible when things don't go as planned."* *"...problem-solving, risk management, and strategic thinking."*
Leadership & Professional Development	…gain leadership skills through team captainship, event planning, and industry networking	6	*"...leadership skills through captainship and team leader opportunities."* *"...teamwork, communication, leadership, quantitative reasoning, and media production skills."*

Note. Data obtained from the esports staff survey (*n* = 13).

Perceived Skills Learned and Development from Collegiate Esports: Players

Research Question:
- **According to VOICE-affiliated collegiate esports <u>players</u>, what are the perceived skills they have learned and developed from playing esports?** *[open response]*

Results: Esports players (*n* = 198) perceive that playing esports promotes the learning and development of transferable skills pertaining to **teamwork**, **communication**, **leadership and people management**, **time management**, and **esports game improvement** (Table 60). Other less significant but still emergent themes related to problem solving and critical thinking, social and networking skills, stress management and mental resilience, organizational and management skills, and self-discipline and work ethic. Self-awareness and self-assessment (*n* = 10; 5.1%) as well as patience (*n* = 6; 3.0%) were noted by a few in the sample. Only 4.0% (*n* = 8) of players listed nothing, not much, or unsure.

Table 60. Esports Player's Perceptions regarding what Skills they have Learned and Developed from Participating in Collegiate Esports

<u>Theme</u>	<u>Theme Description</u> *Playing esports…*	<u>Frequency Count</u>	<u>Representative Quotes</u>
Teamwork	…fosters skills needed for successful collaboration in team settings	87 *(43.9%)*	*"Working with others with different perspectives and going through adversities as a team."* (University 1) *"Teamwork and communication in extremely chaotic environments."* (University 10) *"Teamwork and how important it can really be."* (University 3)
Comm-unication	…helps develop verbal and non-verbal communication skills, crucial for in-game strategy and real-world teamwork	80 *(40.4%)*	*"Practiced critical thinking skills. Being a caster has helped me to improve public speaking skills which I struggle a lot with."* (University 6) *"Management, communication, public speaking and interviewing."* (University 4) *"Effective communication in a chaotic environment."* (University 7)
Leadership & People Management	…promotes leadership growth through team coordination and managing people	54 *(27.2%)*	*"Leadership, the ability to listen to everyone's perspectives, teamwork."* (University 9) *"Developed as a leader when needing to deal with people's lack of taking things seriously primarily and developed as a player tremendously."* (University 12) *"I have improved my leadership skills, and my overall quick-thinking ability."* (University 10)
Time Management	…nurtures balancing gaming, academics, and personal life through increased responsibility and establishing routines	32 *(16.1%)*	*"I've learned how to develop and maintain interpersonal relationships and how to manage a workload as much as being a full-time student plus 20-30 hours a week on esports."* (University 7) *"Other than game skills, I would say time management."* (University 9) *"Bettering my leadership skills, time management, communication."* (University 5)
Game-specific Skills	…improves mechanics, hand-eye coordination, reaction time, strategy, and overall perceived gameplay	30 *(15.1%)*	*"Arm strength, hand-eye coordination, speed, teamwork."* (University 1) *"Definitely the biggest is team coordination and communication, as well as just becoming better at the video game itself."* (University 7) *"I learned how to get better in the games I play. And I learned how important teamwork is in the competitive scene."* (University 12)
Problem-solving & Critical Thinking	…facilitates problem-solving, critical thinking, and decision-making skills	27 *(13.6%)*	*"Critical thinking, leadership, and problem solving."* (University 9) *"Teamwork, multitasking, better cognitive abilities, and decision making."* (University 4) *"Problem solving, working under pressure, and working with other people."* (University 2)

Theme	Theme Description *Playing esports…*	Frequency Count	Representative Quotes …*continued*
Social & Networking Skills	…fosters networking and social skills (e.g., sportspersonship, empathy)	20 *(10.1%)*	*"I have learned how to connect with people outside of my skill group and how to compete in a healthy manner."* (University 5) *"Leadership skills, networking, inter-personal conflict management, problem solving, and how to make decisions with incomplete information."* (University 12) *"I've learned better social skills, and I have learned how to play Smash Bros."* (University 9)
Stress Management & Mental Resilience	…helps players practice managing emotions under pressure, perseverance, and overcoming adversity	19 *(9.6%)*	*"Strategy and being calm in stressful environments."* (University 10) *"I've learned how to calm myself and focus on my work when necessary, and I've learned skills necessary to analyze situations and myself for the sake of improvement."* (University 3) *"Mental fortitude, perseverance, and analysis of my gameplay."* (University 7)
Organizational & Management Skills	…facilitates learning and developing organizational and event and program management skills	16 *(8.1%)*	*"Organization: I help to organize tournaments for the gaming club and esports. Teamwork: I have to talk to many people in order to get an event through. Working under pressure: you don't win games if you crash out."* (University 10) *"Excel, general administrative skills, professional writing."* (University 1) *"Interpersonal skills, team organization, program organization, professional development."* (University 12)
Self-discipline & Work Ethic	…promotes discipline and a strong work ethic	15 *(7.6%)*	*"Confidence, leadership, discipline, mental control, and positive outlook in poor situations."* (University 10) *"Teamwork, leadership, self-regulation, and results from hard work."* (University 5) *"Better communication skills, better work ethic."* (University 7)

Note. Data obtained from the esports player survey ($n = 198$).

Collegiate Esports Roles

Research Question:
- **Beyond player, what <u>other collegiate esports-related roles</u> do VOICE-affiliated players report performing?**

Results: A pre-determined list of 26 different potential non-player collegiate esports roles based on prior literature was provided, as well as an open-response option to report something not on the list. Esports players ($n = 198$) were instructed to "select all that apply". As seen in Table 61, 73.2% ($n = 145$) of the sample took on collegiate esports-related roles beyond player. Across the entire sample, the average collegiate esports player took on 1.7 roles beyond player, with the highest number of different roles performed being 15, as reported by one student from University 1 and one student from University 4. 26.8% ($n = 53$) of the sample indicated they took on no collegiate esports-related roles beyond player. Beyond player, the most prevalent roles the players reported performing were esports team captain (30.3%; n = 60), shot caller or in-game leader (IGL; 29.8%; $n = 59$), esports caster/broadcaster (12.1%; $n = 24$), esports fundraising (11.1%; $n = 22$) – heavily skewed by University 10 players, and esports team coach (9.6%; $n = 19$). Related, Table 7 provides a listing of VOICE-affiliated institution paid esports staff positions, including student workers. However, most of the positions listed in Table 61 are unpaid.

Table 61. Esports Player's Non-player Roles Performed within their Collegiate Esports Program

Non-player Esports-related Roles	Univ. 1 (n=8)	Univ. 2 (n=18)	Univ. 3 (n=17)	Univ. 4 (n=23)	Univ. 5 (n=13)	Univ. 6 (n=8)	Univ. 7 (n=20)	Univ. 9 (n=18)	Univ. 10 (n=56)	Univ. 11 (n=2)	Univ. 12 (n=15)	# of Students Per Role	% of Sample who Performed that Role
Assistant Director (esports)	1					1						**2**	**1.0%**
Captain (esports team)	2	5	7	6	5	3	4	4	15	2	7	**60**	**30.3%**
Caster (broadcaster)	1		4	1	1	1		3	11	1	1	**24**	**12.1%**
Coach (esports team)	2	2	2	1	3	1	1	1	6			**19**	**9.6%**
Competition Organizer or Manager (esports)	1		1	2	2			1	2	2		**11**	**5.6%**
Director (esports)				1					1			**2**	**1.0%**
Discord Moderator (esports)	1		3	2	1			1	2			**10**	**5.1%**
Diversity Manager (esports)												**0**	**0.0%**
Event Organizer or Manager (esports)	2		2	2		1		1	7	1		**16**	**8.1%**
Graphic Design (esports)	1		1	1	1			1	4		1	**10**	**5.1%**
Facility/Lab or Equipment Manager (esports)	1						1		3			**5**	**2.5%**
Fundraising (esports)				1				1	20			**22**	**11.1%**
Graduate Assistant (esports)									1		1	**2**	**1.0%**
Marketing (esports)	1	1		1	1			1	2			**7**	**3.5%**
President (esports club)				1								**1**	**0.5%**
Recruiting (esports)	2		1	2	1	1		3	3	1	1	**15**	**7.6%**
Secretary (esports club)												**0**	**0.0%**
Shot Caller or In-game Leader (IGL)	6	5	5	8	1	3	6	3	15	1	6	**59**	**29.8%**
Social Media Manager (esports)		1		2	1			1	1			**6**	**3.0%**
Sponsorships & Partnerships (esports)				1					3			**4**	**2.0%**
Stream Producer (esports)	1		1	1		1			4			**8**	**4.0%**
Team Manager (esports)	2		1	3	1	1	2		5	1	1	**17**	**8.6%**
Tournament Organizer or Manager (esports)	1		2	2			1		3			**9**	**4.6%**
Treasurer (esports club)			1									**1**	**0.5%**
Vice-President (esports club)			1						1			**2**	**1.0%**
Video Content Producer (esports)		1	1	2	1	1	2		4			**12**	**6.1%**
Other: Analyst (esports)									1			**1**	**0.5%**
Other: Motivator		1						1				**2**	**1.0%**
Other: Production Assistant (esports)			1									**1**	**0.5%**
Other: Program Communication								1				**1**	**0.5%**
Other: Scouting Opponents (esports)											1	**1**	**0.5%**
NONE (player only)	2 (25.0%)	8 (44.4%)	4 (23.5%)	8 (34.8%)	4 (30.8%)	0 (0.0%)	9 (45.0%)	7 (38.9%)	11 (19.6%)	0 (0.0%)	2 (13.3%)	**53 (26.8%)**	**26.8%**
Total:	27	24	38	48	23	14	26	30	125	9	21	385	1+ Role
Avg. Non-player Roles per Student:	3.1	0.9	2.0	1.7	1.5	1.8	0.9	1.3	2.0	4.5	1.3	1.7	73.2%
Non-player Roles per Student Range:	0 to 15	0 to 3	0 to 5	0 to 15	0 to 8	1 to 4	0 to 4	0 to 10	0 to 8	3 to 6	0 to 3	0 to 15	(n=145)

Note. Data obtained from the player survey (*n* = 198). There were no player survey responses from University 8. University 7's data includes 1 player from [redacted] and 1 player from [redacted] which are students from branch campuses under the purview of University 7's esports program director.

References

Akkaya, S., Şen, B. G., & Kapıdere, M. (2021). A multi-directional assessment related to E-sports as A new game experience field and socialising tool. *Atatürk Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, *25*(3), 968-988. https://doi.org/10.53487/ataunisosbil.944458

Aranas, K., Elmergreen, J., Gordon, K., Gouglas, S., Kagel, B., Robison, C. & Sollazzo, A. (2021). Benefits of Video Games in K-12 Education. Higher Education Video Game Alliance and Entertainment Software Association. https://www.theesa.com/resources/benefits-of-video-games-in-k-12-education

Berg, B. L. (2009). *Qualitative research methods for the social sciences*. Allyn & Bacon.

British Esports Association. (2019, July). Esports: The world of competitive gaming. https://britishesports.org/wp-content/uploads/2019/07/What-is-esports-PDF-JUL19-V4.pdf

Buzzelli, A., & Draper, J. (2021). Are they athletes? A self-assessment of athletic identity measurement and perceived benefits of collegiate Esports participants. *Recreational Sports Journal*, *45*(2), 117-130. https://doi.org/10.1177/15588661211033252

Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). Sage.

Dekker, S., & Slotboom, C. (2023). Benefits of recreational gaming. *International Journal of Esports*, *1*(1), 1-11. https://www.ijesports.org/article/96/html

Delello, J. A., McWhorter, R. R., Roberts, P. B., De Giuseppe, T., & Corona, F. (2023). The risks and rewards of collegiate esports: A multi-case study of gamers in the United States and Italy. *International Journal of Gaming and Computer-Mediated Simulations (IJGCMS)*, *15*(1), 1-22. https://doi.org/10.4018/IJGCMS.317115

Delello, J. A., McWhorter, R. R., Roberts, P., Dockery, H. S., De Giuseppe, T., & Corona, F. (2021). The rise of esports: Insights into the perceived benefits and risks for college students. *International Journal of eSports Research (IJER)*, *1*(1), 1-19. https://doi.org/10.4018/IJER.20210101.oa5

Delello, J., McWhorter, R., Yoo, S., Roberts, P., & Adele, B. (2025). The impact of esports on the habits, health, and wellness of the collegiate player. *Journal of Intercollegiate Sport*, *18*(1), 1-22. https://doi.org/10.17161/jis.v18i1.21714

Feng, J. (2024). University students' participation and opinions on esports in China: An empirical research. *Asian Journal of Sport History & Culture*, *3*(3), 306-326. https://doi.org/10.1080/27690148.2024.2395954

Guo, Z., Cahalane, M., & Carbonie, A. (2020). Pursuit of happiness through esports: An interpretive structural approach. Proceedings from the 2020 Pacific Asia Conference on Information Systems (PACIS), *199*, Dubai, UAE. https://aisel.aisnet.org/pacis2020/199

Huk, T. (2019). The social context of the benefits achieved in eSport. *The New Educational Review*, *55*, 160-169. https://cejsh.icm.edu.pl/cejsh/element/bwmeta1.element.ojs-doi-10_15804_tner_2019_55_1_13

Jenny, S. E., & Sharpe, B. T. (in press). Levels of esports. In D. P. Hedlund, S. E. Jenny, & G. Fried (Eds.). *Esports Business Management* (2nd ed.). Human Kinetics.

Ke, X., Wagner, C. (2022). Everyday gaming induces amateur esports participation through commitment. *ECIS 2022 Research Papers*. *105*, 1594. https://aisel.aisnet.org/ecis2022_rp/105

Keith, M. J., Dean, D. L., Gaskin, J., & Anderson, G. (2021). Team building through team video games: Randomized controlled trial. *JMIR Serious Games*, *9*(4), e28896. https://doi.org/10.2196/28896

Lee, J. S., Wells, G., Anderson, C. G., & Steinkuehler, C. (2021). NASEF internal report: Student outcomes and attitudes. https://connectedlearning.uci.edu/wp-content/uploads/2022/09/2021-Y4-Student-Outcomes-and-Attitudes-Report.pdf

Mora-Cantallops, M., & Sicilia, M. Á. (2019). Team efficiency and network structure: The case of professional League of Legends. *Social Networks*, *58*, 105-115. https://doi.org/10.1016/j.socnet.2019.03.004

National Intramural-Recreational Sports Association. (2000). *Quality and importance of recreational services: Technical manual and survey*. NIRSA.

Nothelfer, N., Jenny, S. E., & Besombes, N. (2024). Defining and spelling Esports. In S. E. Jenny, N. Besombes, T. Brock, A. C. Cote, & T. M. Scholz (Eds.), *Routledge Handbook of Esports* (pp. 6-18). Routledge. https://doi.org/10.4324/9781003410591-3

Pagano, M., Gauvreau, K., & Mattie, H. (2022). *Principles of biostatistics* (3rd ed.). Chapman and Hall/CRC. https://doi.org/10.1201/9780429340512

Postell, C., & Narayan, K. (2023). *Trends in collegiate esports: Volume 4 (2022-2023 scholastic year)*. Esports Foundry. https://www.esportsfoundry.com/Trends-in-Collegiate-Esports.html

Rothwell, G., & Shaffer, M. (2019). eSports in K-12 and post-secondary schools. *Education Sciences*, *9*(2), 105. https://doi.org/10.3390/educsci9020105

Scholz, T. M., & Nothelfer, N. (2022). *Research for CULT committee: Esports – background analysis*. European Parliament. https://www.europarl.europa.eu/thinktank/en/document/IPOL_STU(2022)699635

Steinkuehler, C., Anderson, C. G., Reitman, J. G., Lee, J. S., Wu, M., Wells, G., & Gardner, R. T. (2023). Enriched esports: The design and four-year examination of a school-affiliated competitive videogame program for youth. *Journal of Interactive Learning Research*, 34(1), 59-119. https://www.learntechlib.org/primary/p/221828

Steinkuehler, C. & Reitman, J. (2020). *NASEF students' surveyed beliefs and attitudes*. Connected Learning Lab White Paper No. 5013.04. https://connectedlearning.uci.edu/wp-content/uploads/2022/09/5013.04_Y3-Survey.pdf

Steinkuehler, C., Reitman, J., Cho, A., Gardner, R., & Campbell, K. (2019a). *Enriching esports: Assessment of an after school esports program for teens*. Connected Learning Lab White Paper No. 5013.03. https://connectedlearning.uci.edu/wp-content/uploads/2022/09/5013.03_Y2-Survey-Group-Comparisons.pdf

Steinkuehler, C., Reitman, J., Gardner, R., Campbell, K., & Cho, A. (2019b). *Academic and Social-Emotional Learning in NASEF: Quantifying the Patterns in Qualitative Observations*. Connected Learning Lab White Paper No. 5013.02. https://connectedlearning.uci.edu/wp-content/uploads/2022/09/5013.02_Y1-Quant-Analysis-of-Qual-Codes-.pdf

Zomer, C., Magee, L., & Third, A. (2021). *Benefits of recreational gaming and e-sports for young people*. Young & Resilient Research Centre. Western Sydney University. https://www.westernsydney.edu.au/__data/assets/pdf_file/0008/1963835/Benefits_of_Recreation_Gameing_and_e-Sports.pdf