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Barriers to Implementing Esports into a Pre-16 and Post-16 Curriculum

Dissertation

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Abstract:

This study explores the integration of esports within pre-16 and post-16 educational settings, aiming to identify the challenges, perceptions and implementation strategies associated with its adoption as an academic subject. Using a quantitative methodology, data was collected through a Likert scale questionnaire where 34 participants took part. The findings reveal general agreement that budget constraints, lack of awareness, insufficient teacher training, and persistent misconceptions present significant barriers to the development of esports qualifications. However, respondents also expressed strong support for esports as a tool to enhance student engagement, promote transferable skills, and prepare learners for career pathways in the digital economy.

The study highlights the importance of collaborating with industry professionals, government support, and a multi-disciplinary approach to develop relevant and sustainable esports education. While there is optimism about the academic potential of esports, research gaps persist around standardisation, long-term academic value, and inclusivity. The findings suggest a growing readiness within education for esports integration, provided strategic barriers are addressed through targeted policy and investment. This research contributes to the emerging field of esports education by offering a foundational framework for future curriculum development and policy planning.

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1.0 Introduction

The implementation of esports into an educational curriculum has gained attention in the recent years, especially within Further and Higher Education. As esports continues to expand into a global industry, educational institutions are exploring its potential benefits in how gaming can improve skills such as teamwork, strategic thinking, and digital literacy. However, the implementation of esports in the curricula faces several barriers including institutional resistance, lack of funding and concerns over its academic value. This dissertation aims to explore these challenges, identifying the key obstacles that stop esports integration in education and offer insights into how these barriers can be addressed.

1.1 Background of the Study

Esports or competitive gaming has evolved from a hobby into a multi-billion-dollar industry, attracting players spectators and sponsors worldwide. With its rise in popularity, educators and policymakers have started to incorporate esports into their curricula, using its potential to enhance science technology engineering and mathematics (STEM) education, teamwork and career readiness, However, many schools and educators still remain hesitant to take up esports due to various concerns, including stereotypes about gaming, lack of resources and uncertainty regarding its educational value. This study will go into detail these barriers within the context of pre-16 (secondary education and post-16 (further education) curriculum.

1.2 Problem Statement

Despite the growing interest in esports education, its implementation remains somewhat inconsistent across different educational levels. While some institutions recognise its potential, others face logistical, financial, and cultural challenges that precent its integration. The lack of a standardised policies and frameworks further complicates its adoption, leaving educators uncertain about how to structure esports programs. This dissertation seeks to identify the primary barriers to implementing esports in pre and post 16 curricula and outlining its potential benefits of esports in pre-16 and post-16 education.

1.3 Research Objectives

This study aims to achieve the following objectives:

1. To identify the key barriers preventing the adoption of esports in pre-16 and post-16 education.

2. To examine the perceptions of educators and policymakers regarding esports as an academic discipline.

3. To analyse existing case studies of esports implementation in educational institutions.

1.4 Research Questions and Hypotheses

To address the research objectives, this dissertation will explore the following research questions.

RQ1. What are the main challenges preventing the integration of esports into pre-16 and post-16 curricula?

RQ2. How to educators perceive esports as an educational tool?

RQ3. What existing models or frameworks have successfully implemented esports in academic settings?

RQ4 What strategies can be developed to mitigate the barriers to esports integration in education?

This dissertation will also test the following hypotheses:

H1. Institutional resistance is a significant barrier to esports integration in pre-16 and post-16 education.

H2. Limited funding and resources negatively impact the potential of esports programs in schools.

H3. Educators who have prior exposure to esports are more likely to support its inclusion in curricula.

1.5 Scope and Delimitations

This dissertation will focus on the potential barriers to implementing esports in educational curricula within pre-16 (Secondary School) and post-16 (Further Education) settings in the United Kingdom. While esports have a global presence this study will primarily analyse its integration within formal education rather than extracurricular activities. Additionally, this research will rely on a combination of literature reviews, case studies and survey-based data collection, limiting the scope to the limited available academic and industry sources.

1.6 Structure of the Dissertation

This dissertation is structured as follows:

Chapter 2: Literature Review – Examines existing research on esports in education including its benefits, challenges, and case studies of successful implementations.

Chapter 3: Methodology – Outlines the research design, data collection methods, and analytical approach used in the study.

Chapter 4: Findings and discussion – present the research results and discusses their implication in relation to the research objectives.

Chapter 5: Conclusions and Recommendations – Summarises key findings, discusses limitations and [roved recommendations for future research and policy development.

2.0 Literature Review

The implementation of Esports into education has gained attention as research explores its potential to enhancing student learning, it creates innovative teaching practices and generates new opportunities. However, while esports present exciting opportunities, its integration into pre-16 and post-16 is emerging, with varying levels of success and acceptance. This literature review goes into the numerous impacts of esports on students and educational institutions; it will also identify critical research gaps and present a conceptual framework that give support to this study.

2.1 Review of Key Literature

2.1.1 Research Aim: Barriers to Implementing Esports in Pre-16 and Post-16 Education

The implementation of esports into pre-16 and post-16 curricula faces a number of challenges, as stated in “Designing an Interest-Based Integrated Curriculum Around Esports" by Lee et al. There are financial, cultural barriers and concerns about student wellbeing. However, a major barrier is “convincing parents, teachers, and school administrators of the value of esports for interested students, and maintaining the professionalism of the program itself” (Lee, et al., 2020, p. 80). Additionally, many teachers “knew little about esports, so we needed to design the curriculum-building workshops and curriculum itself accordingly” (Lee, et al., 2020, p. 85).

Financial Limitations also is a barrier of integrating esports in education. Many schools “there are still many barriers to its development in the education sector. Both parents' ways of thinking and the support for its practice from governmental instruments are factors that still need further study on this topic” (Sousa, 2022). Without support from both local and national governments means that additional funding for these events will be hard to find and will have to look at the private sector for donators. In the paper “Academic and Social-Emotional Learning in High School Esports” by Reitman et al., it talks about that “Students from lower-income schools showed greater gains than students from higher-income schools” (Reitman, et al., 2022). Even with concerns over the accessibility of equipment.

Concerns over the content and culture also presents a challenge this is because some titles are age rated due to Themes within the game this was discussed in the “Designing an Interest-Based Integrated Curriculum Around Esports" by Lee et al. They state “R-rated because of their violence, and language from some video footage of live esports events were not appropriate for students” (Lee, et al., 2020, p. 84). Another important potential barrier to esports is how “heavily male-dominated, with women representing a lower proportion of participants, fans, and leaders” (Rogstad, 2022, p. 196). This lack of the opposite gender raises concerns about the long term equality of esports programs however I believe that with esports education we would be able to support girls/women into an esports career which is supported by Rogstad (2022) where they said “Women are often marginalised in terms of their access to communities through which they might develop their skills” (Rogstad, 2022). By supplying a safe space for girls and women we can help them develop their skills without the fear of being marginalised.

Institutional doubt can further complicate it integration as “no esports education accreditation exists so programs are not bound to conform to any formal competency requirements outside of standard higher education accreditation or institutional requirements” (Jenny, et al., 2021, p. 5). With this many are still “sceptical of higher education esports programming as these examples appear like the institution is being predatory and why some may not see the value of an esports degree” (Jenny, et al., 2021, p. 24). Additionally, it is important to talk about the concerns over gaming addiction and other psychological effects which can contribute to resistance from schools which is discussed in “The Rise of eSports: Insights into the Perceived Benefits and Risks for College Students” by Delello, et al. They say “psychological research has suggested that gaming has led to an increase in addiction, aggression, and even violence” (Delello, et al., 2021).

Beyond these issues, the logistics of implementing esports in schools present operational challenges. Schools often struggle with “difficulties with program inception, scheduling, and communications, as well as inequities across equipment, access, and student proficiency.” (Reitman, et al., 2022). Time constrains also pose a potential barrier as stated in “Education 4.0 in Developing Economies: A Systematic Literature Review of Implementation Barriers and Future Research Agenda” by Costan, et al. it states that within education “preparing and teaching in a virtual learning platform requires more time than the traditional one.” (Costan, et al., 2021).

2.1.2 Research Aim 2: Perceptions of Educators and Policymakers on Esports as an Academic Subject

The perception of esports as an academic subject varies amongst stakeholders, including educators, students, and policymakers. While student has largely embraced esports-based learning, educators and policymakers remain divided. Many view esports as a recreational activity rather than a legitimate academic field, resulting in pushback about its long-term educational value.

2.1.2.1 Educational Institutions and Career Development

Many educators approach esports with resistance. A LinkedIn article by Minecraft Education noted that “many participants began the program with doubts about using a game platform to teach such a serious subject” (Minecraft Education, 2024). The challenge is getting educators to get out of the mindset that it is just a game.

Educators who have experienced structured esports programs, however, often recognise their potential. For instance, a participant in the Minecraft program stated "The primary professional benefit for me was the increased understanding and ability to now go ahead and teach cybersecurity fundamentals, which I believe all students should be welcomed to. I also feel more comfortable in doing so with the aid of the game/tool Minecraft that many students already are familiar with, thus, making this an easy approach in the classroom.” (Minecraft Education, 2024). It is noted that “teacher buy-in to the concept was necessary for courses to be created and was equally required for its implementation” (Lee, et al., 2020).

Despite some positive experiences, concern remain, Research found that “various stakeholders in education, including administrators and parents, may doubt the value of video game

play in a school setting; bad press surrounding toxic play and behavior in 'gamer' culture may be their only reference point" (Lee, et al., 2020). Furthermore "it appears that some individuals within the esports industry may be sceptical regarding the value of the curricular contents of an academic esports degree" (Jenny, et al., 2021).

2.1.2.2 Students' Attitudes Toward Esports Education

Students have shown an overwhelming positive attitude for esports education. A study reported that "from the first breath that esports took as a high school English course, students received it with nodding approval" (Lee, et al., 2020). Furthermore "by acknowledging students' interests and making a space for their game-related accomplishments, students came to feel more meaningfully connected to both the institution of schooling and the adults participating in it" (Reitman, et al., 2022).

Esports participation is also linked to social-emotional benefits. One study found that students "Students frequently told stories about transformation in their understanding and skills of emotional regulation, social acumen and sensitivity, and the ability to regulate what many refer to as "tilt" – strong emotional responses during gameplay that degrades decision-making and teamwork" (Reitman, et al., 2022).

2.1.2.3 Policymakers' Views on Esports Integration

Policymakers remain cautious about integrating esports into formal curricula. Concerns include lack of professional standards, funding, and the potential for gaming addition. "Despite the huge popularity of esports and its potential as a new form of sport, there is also reason to be concerned about its sustainability due to the lack of professional standards in the esports industry" (Adams, et al., 2019).

Another key issue is the potential impact if esports on student well-being. Research suggests that "participants, both students and administrators, would discuss barriers to diverse participants' involvement, such as sexism or racism, then argue how their own programs were inclusive due to blind try-outs based on skill requirements" (Wilson, et al., 2024). In addition, "marginalized players face a significant challenge of (in)visibility that specific programs are not currently accounting for" (Wilson, et al., 2024)

2.1.2.4 Gender and Inclusion in Esports

Gender diversity in esports remains a challenge. While some educators believe that "gender does not influence the practice of esports" (Sousa, 2022). One article notes that a 12-year-old girl "Ella was featured on a Nickelodeon TV show about the league, and that exposed her to a different side of esports. Internet commenters did not respond well to a woman taking centre stage on a video game broadcast." (Seiner, 2019). Within the paper "Gener in eSports research: a literature review" Rogstad (2022), they point out a common theme using "eSports rests on the myth of meritocracy, which imagines esports as a fundamentally individualistic and meritocratic venture. In reality, men and women players generally play on different teams and in separate tournaments because of the manner in which esports expertise is built up and access to teams is structured" (Rogstad, 2022).

2.1.2.5 Esports as a Career Pathway

Esports are increasingly being seen as a viable career option. Research suggests that "educational institutes that need to compete for student enrolments can benefit from esports programs, as esports becomes increasingly popular amongst adolescents" (Linkinen, 2021). Furthermore, "the general purpose of academic esports programs is to prepare students with the knowledge, skills, and abilities to successfully enter various career fields within the esports ecosystem" (Jenny, et al., 2021).

A study found that "higher education institutions are realizing that implementing an esports program could lead to potential employment for students" (Archibald, 2024). Additionally, "Leveraging the use of technology, specifically digital games, increase student retention and decrease the attrition rate resulting in increased graduation rate." (Turner, et al., 2018, p. 13).

2.1.3 Research Aim 3

2.1.3.1 Esports in Education

The Integration into schools has seen increasing adoption in some countries specifically in the United States with schools using structured programs to promote student engagement, leadership, and skill development. For example, at Samueli Academy, students engage with esports through an ELA curriculum that connects traditional education with career -technical subjects and STEM skills. The program is created around entrepreneurship with students developing business pitches within the esports space. Additionally, they take on leadership roles by organising school-wide esports tournaments and festivals, this reinforces real-world skills in management and event planning. The success of this initiative has led to several public and private schools piloting similar programs for their districts (Lee, et al., 2020).

Beyond academic engagement in high schools in the United States, they also foster interest-driven learning. Research supports the claim that school-affiliated competitive gaming can create environments where students are more engaged in learning (Reitman, et al., 2022). Teacher mentorship and student leadership play a significant role in enhancing these, as they provide structure and guidance (Reitman, et al., 2022).

A major initiative, the Orange County High School Esports League, which launched in 2018 has been carefully created with academic frameworks integrating STEM, ELA (English Language Arts), and Social-Emotional Learning, alongside Career Technical Education (Linkinen, 2021)

Looking away from the United States Norwegian high schools have incorporated esports into their curricula while emphasising physical activity. Some schools include physical conditioning and training in their esports programs arguing that nutrition, rest, and recovery are crucial for youth e-athlete development (Trotter, et al., 2022).

2.1.3.2 Esports in Higher Education

At College/University level, esports program is being integrated into degrees, scholarships, and varsity sports, aligning gaming with an academic and career pathway. UC Irvine and Calwell University are leading this trend by offering scholarships and degree programs in esports management, preparing students for careers in finance, marketing, and gaming industries (Delello, et al., 2021).

Additionally, Robet Morris University became the first university to recognise esports as a varsity sport in 2014, offering gaming scholarships covering “50% tuition and 50% room/board” (Jenny, et al., 2016). Following suit, University of Pikeville in Kentucky also established an official varsity esports program, showing a growing acceptance of esports as part of athletic and academic initiatives (Jenny, et al., 2016).

Beyond the United States in South Korean universities, they have esports in a more structured manner, classifying competitive esports players as traditional athletes and providing scholarships the same as conventional sports (Sousa, 2022). Similarly, Swedish universities have established esports labs to explore the academic potential of gaming and its role in fostering digital skills (Sjödén & Jonasson, 2023).

In the United Kingdom, they have slowly led this charge with academic routes by Pearson who offer a Level 3 BTEC in Esports, and several universities in the United Kingdom offering a range of degrees based around esports including the College of Esports where they “created a Higher Education (HE) institution focusing on the business of esports.” (College of Esports, 2025).

In Europe and North America, esports are being recognised as a legitimate career development tool. Many universities that have incorporated esports into their curricula have reported higher enrolment rates in technology and media-related programs. Those offering esports scholarships have seen increased applications from students in game development, marketing, and event management (Cooper, 2017).

2.1.3.4 Esports in Special Education

Esports have also been explored as an educational tool for students with special educational needs (SEN). A study in Denmark found that integrating esports into classrooms helped improve students’ social skills, communication abilities, and engagement in school activities (Hanghøj, 2021).

Additionally, educators have successfully adapted Counter-Strike: Global Offensive (CS:GO) as a learning tool, observing that structured esports sessions helped students with ASD develop better focus and communication skills (Hanghøj, 2021) However the effectiveness of esports in special education depends heavily on the teacher’s familiarity with gaming culture and their ability to create structured, meaningful lessons (Hanghøj, 2021).

2.2 Identification of Research Gaps

While the integration of esports into pre-16 and post-16 education has gained traction, several key research gaps remain. These gaps highlight areas requiring further exploration to ensure the effective implementation, policy development, and long-term sustainability of esports as an academic discipline.

2.2.1 Lack of Standardised Curricula and Accreditation

One of the most pressing gaps is the absence of a standardised curricula and accreditation framework for esports education, While institutions are integrating esports into academic programs there is currently no formal accreditation, leading to inconsistencies in quality and learning outcomes (Jenny, et al., 2021) Research should explore how universal standards can be developed to ensure esports education is structured and credible and aligned with industry needs.

2.2.2 Limited Long-Term Academic and Career Value Evidence

Despite the growing recognition of esports in education, there is ongoing scepticism regarding its long-term academic value. Many educators acknowledge esports' potential in improving teamwork, communication, and problem solving, yet uncertainty remains whether it can bring meaningful career opportunities (Sousa, 2022) While some institutions now offer esports-related degrees (Cooper, 2017). Studies tracking sports students' academic performance, career paths, and industry placement remains limited. Future research should examine if esports education can lead to stable employment and how it compares to traditional STEM or media programs.

2.2.3 Need for More Observational Studies on Learning outcomes

Esports is increasingly utilized as an educational tool, yet research on its effectiveness in improving student engagement, motivation and cognitive skills remains limited (Reitman, et al., 2022) Although some studies suggest esports enhances critical thinking, strategic decision making, and leadership skills, quantitative research is still needed to validate these claims. Additionally, there is limited research on how esports impact students with Special Educational Needs (SEN). One study found students with ASD improved their self-confidence and teamwork skills through esports participation (Hanghøj, 2021), but further research is needed to determine best practices for inclusivity.

2.2.4 Need for More Observational Studies on Learning outcomes

Esports's reliance on prolonged screentime raises concerns about gaming addiction, mental health, and poor behaviour. Some research suggests gaming can contribute to increased aggression and addiction tendencies (Delello, et al., 2021). Although initiatives to integrate physical activity into esports training exist (Trotter, et al., 2022), studies evaluating the effectiveness of these are scarce. Additionally, exposure to toxicity and online harassment remains largely unaddressed in esports education literature, warranting research on mental health safeguards, digital well-being, and esports code of conduct frameworks.

2.2.5 Barriers to Diversity and Inclusion

While esports have the potential to be an inclusive field, existing research highlights significant gender and racial disparities. Studies indicate that esports remain male-dominated with women representing a lower proportion of participants, fans, and leadership roles (Rogstad, 2022). Furthermore, communities that face limitations and stereotyping (Wilson, et al., 2024), Research is needed to explore effective inclusion strategies, such as diversity scholarships, mentorship programs and policy changes to create equal opportunities in esports education.

2.2.6 Institutional and Policy-Level Challenges

Institutional resistance to esports integration remains a major challenge. Many school administrators and policymakers question its value, viewing gaming as a recreational rather than an academic activity (Lee, et al., 2020). Additionally, funding constraints hinder the implementation, with research indicating that schools lack financial resources to support esports programs (Sousa, 2022). More research is needed to explore policy-driven funding models, private-sector sponsorships, and government-backed esports education grants.

2.2.7 Misalignment Between Esports Education and Industry Needs

A gap exists in how esports education aligns with real-world industry requirements. While some universities now offer degrees in esports management and marketing, many programs fail to target in-demand industry roles, such as broadcasting, game design and analytics (Jenny, et al., 2021). This gap raises concerns about whether students graduating from esports programs are equipped with industry-relevant skills and experiences. Future research should analyse industry expectations and assess whether esports curricula effectively bridge the gap between education and employment opportunities.

2.3 Conceptual Framework for Esports Implementation in Education

The integration of esports into education is an emerging academic subject with research highlighting its potential, challenges, and institutional frameworks. Existing literature identifies three core aspects in esports education: educational adoption, perception, and implementation.

2.3.1 Educational Adoption and Theoretical Foundations

Esports align with constructivist learning theories (University at Buffalo, n.d.) and digital literacy. Programs like the Orange County High School Esports League demonstrates how esports can support STEM and social-emotional learning (Linkinen, 2021).

However, esports education lacks standardised accreditation, resulting in inconsistencies in program quality (Jenny, et al., 2021). The literature suggests a need for formal competency frameworks to ensure legitimacy.

2.3.2 Stakeholder Perceptions

Educators and policymakers remain divided on esports' academic value. Some view gaming as a distraction (Delello, et al., 2021) while other recognise its engagement potential (Cooper, 2017) Research also highlights esports' role in social-emotional development, with students improving their emotional regulation, teamwork and leadership (Reitman, et al., 2022). The division suggests that further research is needed to assess esports' long-term educational benefits and career alignment.

Esports also support social emotional development, helping students regulate emotions, enhance teamwork, and develop leadership skills (Reitman, et al., 2022). Overcoming scepticism will require data-driven advocacy and showcasing esports career pathways.

2.3.3 Institutional Implementation: Strategies for success

Limited resources prevent esports adoption, with schools struggling to afford equipment and facilities (Sousa, 2022). Solutions include government grants, corporate sponsorships, and shared esports spaces (Jenny & Besombes, 2022). Educators require structured training to integrate esports effectively (Hramiak & Boulton, 2013). Certification programs from organisations like NACE help bridge knowledge gaps, enabling teachers to align esports with STEM and business curricula (Jenny, et al., 2016).

Esports are still male dominated, with barriers limiting participation for women and marginalised groups (Rogstad, 2022). Institutions should implement diversity scholarships mentorship programs and mixed-gender teams to foster inclusion (Wilson, et al., 2024)

2.4 Conclusion

The literature shows a broken landscape regarding esports in education. While studies support its role in academic engagement, social-emotional learning, and career development, challenges remain in stakeholder scepticism, funding limitations, and inclusivity concerns,

Future research should focus on:

- Studies tracking esports impact on student outcomes.
- Standardised accreditation to formalise esports education.
- Institutional best practices for teacher training and funding structures

By addressing these gaps, esports can transition from an emerging educational trend to an established academic subject.

3.0 Methodology

Throughout this section will outline the methodological approach taken to investigate the research objectives surrounding the implementation of esports in pre-16 and post-16 education. It details the research design, data collection methods, sampling strategies, analytical procedures, ethical considerations, and limitations of the study.

3.1 Research Design

This study uses an online survey design using a Likert-scale questionnaire distributed to educators. This design enabled the collection of measurable data across various areas such as perceived barriers, support structures and institutional readiness. Quantitative research approached was used to allow the collection of data that could be analysed to identify patterns and trends related to the integration of esports into educational settings.

3.1.1 Research Aim 1

The aim of this research is to analyse the barriers and challenges in developing and implementing esports qualifications at both pre-16 and post-16 levels, and to propose recommendations for establishing a sustainable educational framework that addresses these challenges across both stages.

To achieve this a quantitative research approach was adopted, using a structured survey distributed to a diverse sample of educators working in both pre-16 and post-16 educational settings. This approach allowed for the collection of measurable and comparable data. This will also allow the collection of measurable and comparable data, facilitating the identification of key patterns and trends relating to barriers preventing the implementation of esports.

The survey focused on assessing the perceived significance and frequency of challenges using the Liker scale. This allows for the data to be evaluated for the relevance and impact for each barrier across different educational levels.

3.1.2 Research Aim 2

The second research aim is to investigate the specific challenges and opportunities involved in developing and implementing pre-16 esports qualifications This includes a focus on student engagement and institutional support that influence the integration of esports in education.

A Quantitative methodology was used to gain a clearer understanding on how educators at the pre-16 level perceive the inclusion of esports as an academic subject. The use of a structured Likert scale survey enabled to collect data that showed the extent of how educators agreed or disagreed with statements relating to barriers, benefits and potential impacts on student learning and engagement.

The data collected offered insights into the willingness of institutions to adopt esports initiatives, preparedness of teachers to deliver the content and the institutional readiness in terms of equipment and training.

3.1.3 Research Aim 3

The third research aim focuses on examining how esports has been implemented across various educational settings, both at pre-16 and post-16 levels. The purpose is the extract insights, trends and best practices that can inform future development. Although case studies are typically qualitive in nature, this research uses a quantitative approach to evaluate key themes from the literature and measure their relevance among educators surveyed.

3.2 Data Analysis Procedures

After the data collection phase, responses were exported from Microsoft Forms into a Microsoft Excel spreadsheet for preparation. This involved checking for incomplete responses and ensuring the data was formatted correctly for easier analysis.

Descriptive statistics such as percentages and averages were used to identify general trends and summarise key findings from the responses these helped to provide an overview of common views on esports in education.

Where appropriate, inferential statistics were also used to explore relationships between different variables for example, comparisons were made between responses from pre-16 and post-16 educators to identify any difference in perceived barriers,

This approach allowed both a broad overview and deeper insights into the data, support the research aims of the study.

3.3 Ethical Considerations

Ethical standards were strictly followed through the research process to protect the rights, privacy, and well-being of all participants. Prior to taking part in the survey, all participants were informed what the survey was regarding and how they could withdraw from the study at any time and, how their data will be used.

implied consent was obtained from the survey participants by completing the form voluntarily online. Prior to starting the survey participants had a disclaimer to read which allowed any questions that is submitted to be used for research purposes outlined in the disclaimer.

To protect the anonymity and confidentiality, no personally identifiable information such as name, email address, or institutional affiliations was collected. All responses were stored securely and used solely for academic purposes. Only the researcher had access to the raw data. Participation in the survey was entirely voluntary, and participants were made aware they could exit the survey at any time.

3.4 Limitations of the Methodology

While this research aimed to provide a meaningful contribution to the understanding of esports education, several limitations should be acknowledged. One of the primary limitations was the relatively small sample size, which reduces the reliability of the findings. A larger sample would have allowed for a more robust analysis and a more comprehensive sample of views across different educational institutions.

Access to participants was another notable limitation. Despite efforts to contact a wide range of pre-16 and post-16 educational institutions, the response rate was lower than expected. Many institutions did not reply to initial or follow-up contact attempts, which limited the diversity and scale of perspectives included in the study. This may have introduced a level of response bias, as those who chose to participate may already have had a specific interest in esports education.

Additionally, due to time constraints and the scope of an undergraduate dissertation, the research focused solely on quantitative data collected via surveys. While this approach was effective in identify general trends and attitudes, it limited the opportunity to explore deeper, qualitive insights that could be gathered through interviews or focus groups.

Despite these limitations, the data collected still offers valuable insights into the current landscape of esports education. It highlights key barriers and perceptions that can inform future academic inquiry, educational policy, and curriculum development. These findings also provide a foundation for further research involving larger and more diverse samples, as well as a mixed method approach to explore the topic in greater depth.

4.0 Results

This chapter presents the analysis of data collected through a quantitative survey distributed to 34 participants, primarily educators, to assess the perceived barriers, perceptions, and strategies for implementing esports in pre-16 and post-16 education. The survey responses were measured using a 5-point Likert scale, where 1 indicated strong disagreement and 5 indicated strong agreement. For clarity, responses were categorised into the following bands for interpretation.

- 1.0-2.4 = General Disagreement
- 2.5-3.4 = Neutral
- 3.5-5.0 = General Agreement

The results are analysed under each research aim and highlight the trends, attitudes and challenges related to Esports integration within education settings.

4.1 Overview of Findings

The findings from the questionnaire suggests that there is growing recognition of esports as a viable and potentially valuable subject within modern education. Most of the mean scores for the items surveyed fall within the general agreement category (3.5-5.0), indicating a positive attitude toward esports as an academic subject among respondents. However, some challenges were also evident particularly relating to the infrastructure and policy required for widespread implementation, as well as ongoing concerns regarding curriculum alignment and stakeholder resistance.

Across the three research objectives the data presents a consistent view while enthusiasm and belief in the benefits of esports are widespread actual implementation is hindered by institutional limitations, lack of teacher training and a lack of funding, the findings also show that educators are beginning to consider esports not only as an extracurricular activity but also as a credible and structured pathway that can develop key transferable skills and knowledge. To see the data that was processed please refer to appendices A – D.

4.1.1 Research Objective 1: Challenges to Curriculum Development Implementation

Responses related to Objective 1 shows a clear perception that multiple barriers exist in both developing and implementing esports curricula. The statement “There is a lack of awareness about Esports as a valid subject for education.” Received a strong mean score of 4.2, indicating a wide agreement that esports still lack formal recognition within mainstream education. This

suggests that despite its growing popularity, esports have yet to achieve the legitimacy that other academic subjects have.

Regarding the structure and content of the curriculum, statements like Esports qualifications for students lack clarity in terms of learning outcomes," and "Developing a standardised Esports curriculum is challenging due to rapid industry changes" all received a mean score of 3.4. This places them in the neutral category highlighting uncertainty among respondents. While these are acknowledged challenges, the middle group response may reflect differing experienced among schools some perhaps already experimenting with esports while others remain in early stages of face resistance from their institutions.

On the implementation side, however views are more definitive. Statements like "Schools face budgetary constraints that limit investment in Esports resources" received a mean score of 4.3 and "Educators lack adequate training and knowledge to teach Esports effectively" received a mean score of 4.1 which indicates that there are challenges within training and infrastructure are still major barriers. Similarly, the idea that "The integration of Esports qualifications is hindered by misconceptions about gaming and its relevance to education" scored a mean score of 4.2, suggesting that the prejudiced views about gaming still influence the decision making in schools. The strong agreement shown here shows the need for awareness campaigns and support for teachers.

4.1.2 Research Objective 2: Perceptions of Esports as an Academic Subject

The results for the second research objective were among the most strongly supported in the data, indicating a substantial agreement on how Esports is perceived within education. For example, the highest agreement was for the statement "Esports education supports the development of transferable skills such as teamwork and critical thinking," with a mean score of 4.5. This high score suggests that educators are not only aware of esports' relevance but see it as a method to deliver digital skills needed within modern education. These include collaboration, communication strategic thinking and digital literacy.

Another positively received statement was "Esports has significant potential to enhance student engagement in education" which received a mean score of 4.4, Indicating strong support for the idea that esports can serve as a motivating factor for students, especially those less engaged in traditional teaching techniques. Participants also agreed that "Esports qualifications should be treated as seriously as traditional academic subjects" this received a mean score of 4.1 showing a move of perception toward esports as a discipline worthy of institutional legitimacy.

Interestingly, the statement "The Pre-16 Esports curriculum can serve as a foundation for Post-16 Esports pathways" which received a mean score of 4.2, confirming the importance of using a scaffolding approach within esports education across the academic stages. This perspective aligns with the broader educational subjects that puts emphasis on skill progression. Additionally, the idea that "Students are likely to show interest and motivation toward Esports education if offered" scored 4.1, reinforcing the belief that student demand for such programs already exists and should be supported through policy and infrastructure.

4.1.3 Research Objective 3

The final research objective explores case studies and methods of overcoming barriers and creating a sustainable esports pathway in education. For this I will be using the questionnaire as it shows solid foundations but also case studies where esports are already implemented as a subject or as an extra-curricular activity. Every statement in this category received a general agreement, indicating a strong link amongst educators on the practical steps that could be taken to integrate Esports effectively.

The highest score in this section was for the statement “Including interdisciplinary links (e.g., IT, business, media) makes Esports education more engaging and practical” with a mean score of 4.4. This shows a clear desire among educators to integrate esports within broader academic subjects, allowing students to see its application across various sectors. By using this approach, it supports curriculum development and increases the subject’s appeal. The statement “Awareness campaigns about the benefits of esports can reduce resistance from key stakeholders” scored 4.0 showing recognition that cultural change and shift in perception must accompany any structural reforms.

Finally, statements related to collaboration and support also scored highly for example: “Highlighting career pathways in Esports can promote the acceptance of Esports education” and “Schools would benefit from government funding specifically for Esports-related initiatives” both scored a mean score of 4.3 indicating to the importance of policy advocacy and financial support. Furthermore, the statement “Collaborating with Esports industry professionals helps create a relevant pre-16 curriculum” scored a mean score of 4.2 this puts the importance of the value of external partnerships to ensure that academic programs remain industry relevant. Collectively these responses highlight that while implementation remains challenging educators have a clear sense of what is needed to move forward.

Looking at case studies a good example on how esports can be integrated into curriculum is at the College of Esports located in London, United Kingdom. The College of esports is a “world first university level institution dedicated to the exciting and contemporary world of gaming and esports.” (College of Esports, n.d., p. 3). The institution also works alongside The British Esports Federation. The College of Esports also says that their exclusive partnership with British Esports allows the courses that “are created “by the industry, for the esports industry” (College of Esports, n.d., p. 5).

4.2 Data Presentation

This section presents the quantitative findings derived from the questionnaire distributed to 34 educators. Respondents rated a series of statements related to each of the three research objectives using a Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). For clarity, the results have been grouped according to each research objective and presented using both tables and graphs. Mean scores have been calculated for each item to identify general patterns and perceptions. These are interpreted using the following scale: 1.0–2.4 = General Disagreement, 2.5–3.4 = Neutral/Unclear, and 3.5–5.0 = General Agreement. This visual and numerical representation provides a foundation for deeper analysis in the following sections.

To provide a clear overview of the survey findings, a series of descriptive tables have been compiled to summarise the responses for each of the categories. These tables present the mean scores for each Likert-scale item, offering insight into the overall trends and perceptions of the 34 educator respondents. The mean values, ranging from 1.0 to 5.0, are interpreted using predefined categories.

Challenges to curriculum Development:

Statement	Mean	Interpretation
There is a lack of awareness about Esports as a valid subject for education.	4.2	Agreement
Existing curriculum guidelines hinder the inclusion of Esports-related content.	3.4	Neutral
Esports qualifications for students lack clarity in terms of learning outcomes.	3.4	Neutral
Developing a standardised Esports curriculum is challenging due to rapid industry changes.	3.4	Neutral
Teachers face difficulty in aligning Esports education with traditional academic goals.	3.6	Agreement

Challenges to curriculum Development:

Statement	Mean	Interpretation
Schools face budgetary constraints that limit investment in Esports resources.	4.3	Agreement
There is insufficient access to appropriate technology and infrastructure for Esports education.	3.9	Agreement
Stakeholders (e.g., parents) are resistant to adopting Esports in the curriculum.	3.8	Agreement
Educators lack adequate training and knowledge to teach Esports effectively.	4.1	Agreement
The integration of Esports qualifications is hindered by misconceptions about gaming and its relevance to education.	4.2	Agreement

Strategies to Implementation:

Statement	Mean	Interpretation
Collaborating with Esports industry professionals helps create a relevant pre-16 curriculum.	4.2	Agreement
Highlighting career pathways in Esports can promote the acceptance of Esports education.	4.3	Agreement
Schools would benefit from government funding specifically for Esports-related initiatives.	4.3	Agreement
Including interdisciplinary links (e.g., IT, business, media) makes Esports education more engaging and practical.	4.4	Agreement
Awareness campaigns about the benefits of Esports can reduce resistance from key stakeholders.	4.0	Agreement

General Perceptions:

Statement	Mean	Interpretation
Esports has significant potential to enhance student engagement in education.	4.4	Agreement
Esports education supports the development of transferable skills such as teamwork and critical thinking.	4.5	Agreement
Esports qualifications should be treated as seriously as traditional academic subjects.	4.1	Agreement
The Pre-16 Esports curriculum can serve as a foundation for Post-16 Esports pathways.	4.2	Agreement
Students are likely to show interest and motivation toward Esports education if offered.	4.1	Agreement

4.3 Analysis of Results

The analysis of the Likert scale questionnaire responses provides a valuable overview of how educators perceive the current opportunities, challenges, and implementation strategies for esports within both pre-16 and post-16 educational settings. The findings, collected from 34 participants, were grouped into three key research aims and analysed using mean scores to determine levels of agreement, neutrality, or disagreement. Using the predefined scale (1.0–2.4 = General Disagreement, 2.5–3.4 = Neutral/Unclear, 3.5–5.0 = General Agreement), the results offer important insights into both the barriers and the growing support for esports as an academic subject.

For objective 1 which focused on the barriers to curriculum development and implementation, the responses show a general agreement that challenges still continue. These include a lack of awareness, unclear learning outcomes, difficulties aligning esports with existing academic goals and budgetary limitations. Particularly strong agreement was noted regarding the financial and technological barriers facing schools, as well as the lack of professional development for educators.

Objective 2 explore the perceptions of esports as an academic subject; this produced the most positive set of responses. Participants generally agreed that esports can improve student engagement, support the development of valuable transferable skills, and should be taken seriously as part of a structed academic subject. There was also agreement on the potential of esports to build upon the pre-16 and post-16 pathways, through a few responses showed slightly more cautious views on the long-term academic recognition.

The responses relating to objective 3, which focused on strategies for successful implementation were also strongly supportive. Participants largely agreed that collaboration with the industry, government funding and the integration of esports into multiple subject areas are crucial to establishing a viable and engaging esports curriculum. Furthermore, strategies amid et promoting awareness and reducing resistance from stakeholders were also well supported by this data.

Overall, the findings show a generally optimistic attitude towards esports education, improved by a realistic understanding of the challenges that need to be overcome. The positive percep-

tion of esports value in education combined with the practical suggestions for implementation, demonstrates strong potential for future growth provided that institutional support, infrastructure, and professional development are also prioritised.

5. Discussions & Conclusion

This chapter summarises the key findings of the study and discusses their relevance to the existing literature on esports education. It reflects on the implications of the results; highlights research gaps and provides practical recommendations based on each research objective. The chapter concludes with final remarks on the overall contribution and significance of the research.

5.1 Summary of Findings

5.1.1 Research Objective 1: Barriers to Implementation and Curriculum Development

The findings show that significant barriers exist in the development and implementation of esports qualifications at both pre-16 and post-16 levels. Educators agreed strongly with statements relating to lack of awareness (Mean = 4.2), budgetary constraints (Mean = 4.3), and misconceptions surrounding esports (Mean = 4.2) highlighting these as key obstacles. Meanwhile, neutral scores on areas such as curriculum alignment and standardisation (Means = 3.4) suggest these remain unresolved and difficult challenges.

5.1.2 Research Objective 2: Perceptions of Educators and Policymakers

Educators and stakeholders displayed a generally positive attitude towards the academic legitimacy of esports. The highest mean score was observed in recognising esports ability to support transferable skills (Mean = 4.5), alongside the high agreement that esports enhance engagement (mean = 4.4) and should be taken seriously as a subject (Mean = 4.1). This suggests a shifting mindset in favour of integrating esports into education, although there are still doubts about the long-term value.

5.1.3 Research Objective 3

Support for implementation strategies was also very strong. Respondents expressed general agreement on the need for collaboration with the industry (Mean = 4.2), Cross curriculum design (Mean = 4.4) and targeted funding (Mean = 4.3). These findings suggest that educators are not only open to esports education but also actively identify viable routes for its adoption within the mainstream curriculum. Furthermore, when we look at current case studies it shows that integrating esports into a curriculum is more than just a theory it is being actively done by multiple institutions in a number of countries.

5.2 Implications

The findings of this research align with and expand upon existing literature, which increasingly recognises the potential of esports as an innovative educations tool. Consistent with Reitman et al. (2022) and Jenny et al. (2021), this study confirms that many educators see esports as a

way to boost engagement and foster 21st-century skills such as communication, teamwork, and critical thinking. The high level of agreement in responses reflect the evolving perception of esports from being purely recreational to academically valuable, which is also expressed in Linkinen (2021) and others.

However, the results also reinforce known challenges. Similar to concerns raised by Lee et al. (2020) and Rogstad (2022), barriers such as institutional scepticism, lack of training and limited technological infrastructure remain prominent. These issues continue to stop the curriculum development and broader adoption, especially at the pre-16 level, where traditional academic frameworks are more firmly set.

A key contribution of this study is its demonstration of the importance of collaboration with industry professionals and cross-curricular integration, confirming suggestions made in conceptual discussions (e.g., Williams, 2020; Archibald, 2024). Yet, this research also highlights several underexplored gaps:

Lack of data: While support for esports is growing, there remains limited quantitative evidence on its long-term academic impact and career outcomes, a concern that is also raised by Sousa (2022).

Curriculum standardisation: Despite initiatives in schools and local authorities, there is still no widely accepted model for esports education. Jenny et al. (2021) emphasised the absence of formal accreditation, and this study reinforces that gap.

Special Education and inclusivity: Although some studies Hanghoj (2021) suggest positive outcomes for students with ASD, this remains a limited area researched. Further investigation is needed to understand how esports can be more inclusively adapted.

Overall, while the literature and this study point towards growing acceptance and practical potential, future research must address these critical gaps to support sustainable, evidence-based implementation of esports across educational levels.

5.3 Recommendations

5.3.1 Research Objective 1: Barriers to Implementation and Curriculum Development

To overcome the key challenges identified in this study such as a lack of awareness, institutional resistance, and infrastructure limitations several actions are recommended:

Awareness and Advocacy Campaigns: Educational leaders and policy advocates should develop campaigns that communicate the academic and career value of esports. This may include public seminars, parent-teacher sessions, or study highlights that highlight positive outcomes from existing programs.

Professional Development and Teacher Training: Institutions should invest in CPD (Continuing Professional Development) opportunities for educators, particularly at the pre-16 level, to improve confidence in delivering esports content. Collaborations with existing esports programs and training providers could bridge the current knowledge gap.

Pilot Curriculum Frameworks: Schools and colleges should collaborate with specialists within the esports industry to co-develop pilot esports qualifications that align with existing national education standards. These pilots can test for scalability, learning outcomes, and curriculum cohesion across education levels.

Infrastructure and Funding Support: Schools must seek partnerships with private-sector esports organisations and government grant schemes to secure funding for equipment, staffing, and program delivery.

5.3.2 Research Objective 2: Perceptions of Educators and Policymakers

Inclusion of Stakeholders in Program Design: Policymakers, educators, and parents should be engaged early in the curriculum development process. Doing so fosters transparency and increases the perceived legitimacy of esports as a valid academic subject.

Sharing Case Studies and Research Data: Institutions should make better use of case studies that document successful esports programs and publish outcome-based research to show impact on engagement, skill acquisition, and progression routes.

Policy Briefs and Government Guidance: Government departments and education authorities should publish position papers and official guidance that legitimise esports in schools, much like existing guidance for other vocational or digital subjects.

5.3.3 Research Objective 3

Industry Partnerships: Schools and colleges should build formal relationships with esports industry stakeholders including developers, event organisers, and production companies to ensure curriculum relevance and offer practical learning experiences.

Interdisciplinary Curriculum Design: Esports should be embedded within broader subjects such as IT, Business, and Media to reinforce cross-subject learning and relevance. This can help bridge theoretical learning with practical application.

Career Pathway Integration: Career services and guidance departments should be equipped with up-to-date knowledge about the esports industry to inform students of viable routes post-education be that in game development, marketing, broadcasting, or coaching.

Inclusion and Access Programs: Institutions should promote inclusion by offering equipment loans, after-school programs, or entry-level clubs that cater to underrepresented groups, ensuring all students can access esports opportunities regardless of background.

5.4 Final Remarks

This study has explored the barriers of implementing esports in pre-16 and post-16 education, identifying both the opportunities and obstacles within this evolving academic subject. The findings highlight that while interest in esports education is growing, there is still significant

barriers such as institutional resistance, lack of a standardised curricula, and limited infrastructure which continues to limit widespread integration. However, the consistent agreement among participants about the educational developmental value of esports suggests strong potential for future integration.

Through a quantitative approach, this research has shown that educators recognise the relevance of esports in fostering student engagement, transferable skills, and modern career pathways. It is now the responsibility of educational leaders, policymakers, and industry partners to put this research into practice.

By addressing gaps in training, funding and stakeholder understanding, esports can evolve from an extracurricular interest into a legitimate and respected subject within mainstream education. The next step is not just to prove that esports have a place in schools but to ensure it thrives there.

Appendices

A – The questionnaire data processed for the Challenges to curriculum development category

There is a lack of awareness about Esports as a valid subject for education.	Existing curriculum guidelines hinder the inclusion of Esports-related content.	Esports qualifications for students lack clarity in terms of learning outcomes.	Developing a standardised Esports curriculum is challenging due to rapid industry changes.	Teachers face difficulty in aligning Esports education with traditional academic goals.
5	3	5	2	1
3	2	2	4	4
5	3	3	2	2
4	3	3	3	5
4	3	4	5	4
5	2	4	2	3
5	1	1	1	1
5	4	4	4	5
5	2	2	2	2
3	3	4	5	4
2	4	4	4	1
4	3	3	4	5
4	4	5	3	4
5	4	4	2	4
5	4	3	4	2
4	5	3	4	4
5	3	4	5	5
5	3	4	4	4
2	4	3	2	5
5	3	4	3	4
5	4	4	2	3
5	5	4	4	5
4	4	4	4	4
5	4	4	5	5
3	2	3	4	4
3	3	4	4	4
5	5	2	3	5
3	3	3	3	3
4	3	2	4	2
5	5	5	5	5
4	4	2	4	4
5	5	5	5	5
5	3	5	4	3
4	4	2	2	3

B – The questionnaire data processed for the Barriers to Implementation category

Schools face budgetary constraints that limit investment in Esports resources.	There is insufficient access to appropriate technology and infrastructure for Esports education.	stakeholders (e.g., parents) are resistant to adopting Esports in the curriculum.	Educators lack adequate training and knowledge to teach Esports effectively.	The integration of Esports qualifications is hindered by misconceptions about gaming and its relevance to education.
5	4	4	5	4
4	3	4	4	4
4	4	4	4	4
5	4	4	4	4
5	2	3	4	4
3	4	2	4	5
2	2	2	4	5
5	4	5	4	5
5	3	2	5	5
5	5	2	4	4
4	4	4	2	4
5	4	4	4	4
4	5	4	4	4
4	3	4	5	5
5	5	5	5	5
4	5	5	4	4
5	5	5	5	5
5	4	4	5	4
2	2	5	4	1
5	5	5	5	3
4	5	4	5	5
4	4	5	5	5
5	5	4	4	5
5	5	4	4	4
4	4	4	5	2
5	5	3	4	4
3	2	2	4	4
3	3	3	3	3
5	4	5	4	4
5	3	4	4	5
4	4	4	3	4
5	5	5	4	5
4	5	5	5	5
5	4	3	2	5

C – The questionnaire data processed for the Strategies to Implementation category

Collaborating with Esports industry professionals helps create a relevant pre-16 curriculum.	Highlighting career pathways in Esports can promote the acceptance of Esports education.	Schools would benefit from government funding specifically for Esports-related initiatives.	Including interdisciplinary links (e.g., IT, business, media) makes Esports education more engaging and practical.	Awareness campaigns about the benefits of Esports can reduce resistance from key stakeholders.
5	4	5	5	5
5	5	5	5	5
3	4	4	4	4
5	5	5	5	4
5	4	4	5	3
5	5	4	4	4
5	5	5	4	5
4	5	5	3	5
5	5	5	5	5
4	5	4	5	4
5	4	5	5	4
4	5	2	4	4
4	4	4	4	4
5	5	5	5	5
4	5	5	5	5
3	4	5	5	5
4	5	5	4	4
4	4	5	5	4
3	2	1	3	1
5	5	5	5	5
5	5	5	5	5
4	4	4	4	4
4	4	5	5	5
5	5	5	4	4
4	2	4	4	2
4	5	5	4	3
4	4	4	5	4
3	3	3	3	3
3	4	5	5	3
4	5	4	5	4
4	4	4	4	4
4	4	5	4	4
5	4	4	4	4
4	5	4	4	4

D – The questionnaire data processed for the general perceptions category

Esports has significant potential to enhance student engagement in education.	Esports education supports the development of transferable skills such as teamwork and critical thinking.	Esports qualifications should be treated as seriously as traditional academic subjects.	The Pre-16 Esports curriculum can serve as a foundation for Post-16 Esports pathways.	Students are likely to show interest and motivation toward Esports education if offered.
5	5	4	4	4
5	5	5	5	5
4	4	3	3	2
5	5	4	5	5
3	5	4	4	4
5	5	4	4	4
5	5	5	5	5
5	5	5	4	5
5	5	4	5	5
5	5	5	4	4
5	5	5	5	5
4	4	3	3	3
4	4	3	3	5
5	5	5	5	4
5	5	5	4	5
4	4	5	5	4
4	4	4	4	5
4	4	3	4	3
3	2	1	2	4
5	5	3	4	4
4	5	5	5	3
4	4	3	4	3
5	5	5	5	5
4	4	5	5	4
4	4	2	3	5
5	4	4	4	4
5	5	5	5	5
3	3	3	3	3
5	5	5	5	5
5	5	4	5	5
4	4	4	4	4
5	5	5	5	5
5	5	5	4	2
4	5	5	4	4

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