

Innovation Built-In intel.

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## 1.

### **Executive summary**

The stage is set for esports to transform learner outcomes and propel students towards future-facing career paths. But not everyone is aware of the benefits of using esports as a tool to engage, inspire and broadly develop student skill sets. So, Dell Technologies set out to evaluate the perception of esports' true value in education and the barriers to adoption. This is important as extracurricular esports activities grow in popularity and a fresh push for an esports curriculum ripples across the UK.

Dell Technologies commissioned OnePoll to execute a survey of 500 educational stakeholders and 1,500 parents of children aged 11-18, to explore the perceptions and experiences of esports in and outside of education. The survey acts as a pulse check for public and private stakeholders looking to support the opportunity, covering a range of topics from inclusion and accessibility to core skillsets and digital career pathways. Ultimately, this survey helps to provide the groundwork for advocates and curious parties determined to progress digital education. Featuring expert commentary from the esports, education and technology fields, this whitepaper demonstrates the importance of collaboration when implementing new, diverse and vocational curriculums.

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## The role and impact of esports in education

The explosive growth of esports represents an abundance of opportunity — not only for brands but for today's students, who have high hopes for their digital futures. These nimble-fingered young gamers have grown up online. Their passion for video gameplay presents an unmissable opportunity for educators to engage students at school and build vital real-world skills.

Their passion for video gameplay presents an unmissable opportunity for educators to engage students at school and build vital real-world skills. There is a palpable urgency to the matter, as businesses report digital skills gaps and post-pandemic social inequities soar. Elevating esports as a powerful vehicle for education that touches a multitude of vocational and academic subjects is key — but first, a number of barriers need to be addressed.

Over the last 20 years, the evolution of the gaming industry and the professionalisation of esports rapidly picked up the pace. Improving technology and connectivity catalysed mainstream growth, supporting superior gaming experiences with increased accessibility and global reach. Meanwhile, the maturation of the professional esports industry places it on a par with traditional sports. The UK esports industry grew an average of 8.5% annually between 2016 and 2019, contributing £111.5 million to the economy the same year. And that was before the pandemic. Unlike traditional sports, esports saw phenomenal participation during the pandemic — thanks to its ability to switch to purely online events. As the industry hots up with talk of gaming's metaverse future, there is no sign of it letting up.

The UK esports industry grew an average of **8.5%** annually between 2016 and 2019, contributing **£111.5 million** to the economy the same year.

### Understanding the educational value of esports

But this progress is often misunderstood and misrepresented. Importantly, gaming is incorrectly conflated with esports. While gaming is a leisure activity that connects players worldwide, esports is a competitive, professionalised industry, with various leagues, teams and a cohort of specialists to ensure optimal performance. The mix-up allows the outdated and incorrect stereotype of the lonesome gamer in their bedroom to prevail, which can be damaging for the prospects of esports in education.

<sup>1</sup> https://ukie.org.uk/value-of-esports-in-UK-2020

The distinction between gaming and esports is important to remember when discussing esports in education — and as we attempt to understand some of the barriers to adoption. Dell Technologies launched a comprehensive survey to understand the current perception of esports among UK education leaders and parents. It also set out to identify the roadblocks to the adoption of esports in education to help build more games-based learning approaches that prepare students for the modern workplace. Brian Horsburgh, education sales director for Dell Technologies in the UK, advocates for the power of esports to engage students in more fun, collaborative and inclusive ways.

Commenting on the findings of the survey, Horsburgh said, "It was important that the report demonstrates the level of understanding of esports, not just from parents but also educators. What we found was very encouraging. Though I thought the bar of knowledge would be a lot more than what it was, how people have understood esports and its journey is still quite outstanding."

Nearly four out of five educational stakeholders in the UK say they believe esports should be taught in schools. This is backed up by almost half of UK parents who believe esports should be added to the school/college curriculum — and two-thirds who think it should be offered as an extra-curricular activity in schools and colleges. With so much enthusiasm among two core groups, that are critical to the progress of esport critical to esports' progress in education, it's fair to ask why — and how — they see this being beneficial. But more importantly, it leads us to question why esports is not a mainstream offering across UK schools. In answer to this question, the report also lays bare the barriers to adopting esports in schools.

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#### Esports in education today

The reality is that as the survey findings reflect, attitudes towards esports in education have progressed. The fundamental support of organisations like the British Esports Association (BEA), which created the world's first formal esports BTEC qualification, has helped drive this forward. With a focus on nurturing the grassroots gaming community, the organisations' British Esports Students Champs connects schools across the UK with a competitive esports tournament.

Tom Dore, head of education at BEA and a seasoned teacher, has watched the tournament flourish since 2018. Starting with just eight colleges and secondary schools piloting the tournament, BEA has seen participation increase every year. Between September and December in 2021, it ran the first competition of the academic year with 140 different schools and colleges taking part, with 372 teams.

Dore says, "The aim of British esports is to inspire future talent. So, we're hoping that some of the kids who are playing in our champs now will go on to be semi-pro or pro within esports. We're providing that talent pathway."

Donna Ford-Clarke, BTEC and technical product director at Pearson, which officially launched the first esports BTEC qualifications in 2019, said: "With global esports revenues growing to \$1,084 million in 2021, the world of esports offers huge employment potential, both in the UK and worldwide." That's why we worked closely with industry experts to create a career-focused set of qualifications that support the rapid growth of the sector and offer learners a pathway into working in esports and related industries."

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Donna Ford-Clarke, BTEC and Technical Product Director, Pearson

The new esports BTEC is a comprehensive qualification offering a diverse range of modules. Ford-Clarke explains, "The Level 3 esports qualifications aim to develop learners' knowledge and skills in key areas, including: enterprise and entrepreneurship, strategy and analysis, events management, video production, shoutcasting, coaching, health and wellbeing, law/legislation and computer networking. Learners will also develop a wide range of transferable skills and knowledge that can be applied to other careers and sectors including digital and STEAM-based careers. This is especially valuable to learners in a changing world where job roles are likely to continually change and the emphasis is increasingly on flexibility, adaptability and transferable skills.

"Upon completion, learners may choose to directly enter careers in the esports industry, or take the opportunity to upskill and further develop their knowledge and skills to progress their careers."

Despite being available for only one and half years, when Dell Technologies commissioned the survey on esports in education, the popularity of the esports BTEC is already clear. Dore says, "As gaming grows in popularity, so does the uptake of the esports BTEC qualification. It was approved by the education skills funding agency — part of the Department for Education — in May 2020, which is late in the education cycle. However, in the last academic year we still had academic 15 centres and 330 students studying the BTEC. There's now 160 centres that have been approved to teach it now and 70 of those centres have actually launched the qualification this year which is phenomenal."

<sup>2</sup> https://newzoo.com/insights/trend-reports/newzoos-global-esports-live-streaming-market-report-2021-free-version/

### Improving learner outcomes with esports

UNESCO is a long-term champion of education through gameplay — building it into sustainability goals and elevating it through the Games for Learning project. It highlights the positive impact games can have on education engagement by building meaningful connections.

But it also demonstrates the powerful impact on social and emotional development, areas that were needed more than ever during the pandemic. This opportunity is extended to a real-world industry context by bringing esports to the fore, broadening the possible outcomes with multiple career pathways, many of which are STEM-focused.

The Dell Technologies survey found that of the education stakeholders who believe esports should be taught in schools in the UK, over half (52%) said it would help increase grades in other subjects — while more than two-thirds (67%) believe it will teach students soft skills. The breadth and depth of esports means a whole range of skills are nourished, from STEM to creative and social team-building skills. Or as Horsburgh says, "I prefer to talk about STEAM and include the arts. It's particularly relevant with esports because there's a lot of art, creativity and production involved. This requires digital skills and increasingly Al comes into it."

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The addition of esports as a skill young people can choose for their Duke of Edinburgh's Award — programmes run in schools, colleges, youth clubs and other organisations aimed at challenging young people to help their community and environment, become fitter, develop new skills and complete an independent outdoors expedition — offers further validation. The learner outcomes are vast and for the esports in education opportunity to be truly valued, understanding the benefits is an important starting point.

https://mgiep.unesco.org/games-for-learning https://mgiep.unesco.org/erticle/using-games-for-transformation-and-social-and-emotional-learning https://www.bbc.co.ul/newsround/58996957

The Duke of Edinburgh's Award chief executive officer, Ruth Marvel said, "The DofE is all about reflecting young people's changing interests and needs and giving them the skills and confidence to make the most of whatever life throws at them. Esports lets them do that in a structured, inclusive and safe way, while also being a lot of fun which is why we recently added it as an activity they can do for their DofE. It's great that parents are now recognising the vital skills esports can give to young people — skills like teamwork, problem-solving and leadership that can really help them stand out in future."



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Ruth Marvel, Chief Executive Officer, The Duke of Edinburgh's Award

#### Cultivating STEM skills

The positive correlation between video gameplay and Science, Technology, Engineering and Mathematics (STEM) skills has implications for career pathways and society in general — supporting the closing of gender gaps in STEM careers and helping to plug the skills gap. In October 2021, the Royal Academy of Engineering released a study highlighting the extent of this gap, calling for the UK to increase the number of STEM graduates by as much as 50% as the UK slips down the international innovation league. The reality is that across Europe only half as many girls as boys are graduating with STEM degrees — and with gaming girls three times more likely to pursue a career in STEM, esports in education forms part of the answer?

Lindsey Eckhouse, commercial director at McLaren, says STEM is huge: "It's such an important piece of our overall education agenda and in racing in general. In esports and particularly in sim racing, it's a team effort — it's not individual. It's all about problem solving: quickly identifying challenges and ways to overcome them together. There's a scientific methodology, too. Players must think systematically as they test different hypotheses and see what works. And finally, they're using data to help inform future strategies".

Bringing these esports experiences into the school curriculum provides a real-world example of how STEM skills are applied. "We are harnessing esports as a vehicle through which to engage more students and help them develop a range of skills and knowledge." Dore explains, "It is what society needs. We are developing future ready citizens, because everything is based around digital and STEM skills."

https://www.bbc.co.uk/news/education-19760351 https://www.isfe.eu/perspective/girls-who-play-video-games-are-three-times-more-likely-to-pursue-stem-careers-than-girls-who-dont/



One of the things that I really advocate for with esports is the development of technological and digital skills that students may not have been able to previously develop due to a lack of access to this technology. This will therefore allow them to make informed decisions about their future education and careers."

Camilla Maurice, Curriculum Manager for Esports, Business and ICT, MidKent College

Camilla Maurice, curriculum manager for esports, business and ICT at MidKent College agrees that developing skills in technology is vital to support students' choices when they leave the education system. "One of the things that I really advocate for with esports is the development of technological and digital skills that students may not have been able to previously develop due to a lack of access to this technology. This will therefore allow them to make informed decisions about their future education and careers."

At MidKent College, state of the art systems, software and hardware enable students to explore digital skill sets. They can embrace the exciting and expanding future of the esports industry. Students learn how the different systems work, the art of promotion and advertising within social media and how to use streaming platforms like Twitch or Discord for communication. This contributes to their practical and media-based communication skills, enabling them to enter a wide range of related careers.

#### Shaping rounded students with soft skills

But esports brings even more to the table for students. Almost half (48%) of UK parents agree that esports develops certain skills that children may not get through traditional learning. Of those parents, 54% believe it builds confidence; 62% believe it teaches teamwork skills; and 54% think it grows communication skills. All three factors are essential in cultivating well-rounded, resilient students and seizing opportunities in the future workplace. Esports provides a structured way to develop these skills.

"I've certainly noticed that students feel completely comfortable talking to their peers, via the likes of Discord or Twitch whilst they are collaborating within a game" Maurice observes. "With our esports teams we're seeing them communicate effectively using their headsets while they're in game play, which they may not have been necessarily comfortable with doing in traditional sports. Additionally, they're developing their entrepreneurial skills with thoughts such as 'What if I had an esports team? How would I design the logo and merchandise?' And it develops from there."

As digital and AI technologies transform the world of work, it is increasingly clear that the workers of today and tomorrow will have to meet new requirements. Research by the McKinsey Global Institute highlights the global and growing demand for technological, social and emotional and higher cognitive skills. It highlights the need for skills that fulfil a set of three foundational criteria: 'adding value beyond what can be done by automated systems and intelligent machines; operating in a digital environment, and continually adapting to new ways of working and new occupations'.

Esports provides this essential, highly adaptable learning experience. Students can try many different roles through esports, from pro-player to analyst, shoutcaster, content creator, or events planner. These require a diverse range of transferable skillsets that provide a vitally dynamic experience and is arguably more representative of the real world. Eckhouse likens the esports journey to the emergence of sport marketing or administration courses 15 years ago. "This is just almost the next iteration of that in a lot of ways, and it's just taking longer for people to think, okay, I guess this is not just a hobby, it can be an actual profession."

#### Tangible career pathways beckon

The good news is over 60% of UK parents believe gaming or esports is a legitimate learning method. However, only 32% say they would be happy for their child to have a career in esports, which leaves plenty of room for improvement. As the industry booms, it offers very legitimate career pathways for all students, and all parents must be on board to ensure equal opportunity. "You have esports as in the profession of competitive gaming, but then there's a vast wider esports industry surrounding this. Students could move into linked areas like marketing, digital media or video production, as well as shout casting within broadcast journalism," Maurice says. "For those students who are more sports-oriented, there's also the opportunity for careers in coaching, psychology and nutrition. There are so many legitimate career pathways within the esports industry that we are encouraging our students to consider and to gain the skills to work towards."

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Esports careers sparkle for young gamers keen to put passion into practice and kick-start a career that will take them places. As a global sports and events-based industry, there is plenty of opportunity to support on the production, marketing or business side – with colleagues from around the world. But through the vehicle of an esports career choices expand even further, to STEM related industries and digital career paths. As STEM and digital skills gaps hamper the workforce today, esports prepares the workers of tomorrow with the vital skills that promise to plug those gaps. It is cultivating tomorrow's innovators, engineers and technologists, when the world needs them most.

<sup>8</sup> https://www.mckinsey.com/industries/public-and-social-sector/our-insights/defining-the-skills-citizens-will-need-in-the-future-world-of-work

https://www.mckinsey.com/industries/public-and-social-sector/our-insights/defining-the-skills-citizens-will-need-in-the-future-world-of-work

# Driving inclusivity with esports

Dell Technologies' survey found that parents were optimistic about the inclusivity of esports. Over two-thirds (70%) state that esports promotes inclusivity amongst children at school/college, with half (50%) agreeing that esports allows for more diversity across its player base.

Their optimism is well founded. By virtue, gaming takes place online and with virtual avatars, transcending physical, gender and location-based limitations found in traditional sports. But as esports becomes embedded in the mainstream education system work still needs to be done to fully unlock the opportunity for all.

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#### Bridging gender gaps

Maurice is an advocate of esports as open and accessible to all, but believes more work needs to be done around girls in gaming and tech: "I think that's still an area for development that a lot of organisations are now tapping into." Eckhouse agrees. "I don't think esports right now does promote gender inclusivity." She says, "The reason I say that is there is still a culture shift that has to happen within gaming. That doesn't make women feel like they can really embrace this field. That happens at a really young age, too. Games are typically marketed to boys, not girls. So, there in starts that shift, where more boys play versus girls. It's really important for big rights holders, big entities, big publishers, to really be focused on creating programmes and tools that empower more girls or underrepresented communities to engage in gaming."

Part of the solution is creating more female role models, finding more appealing games for girls and encouraging them into the world of esports at primary school level. "Traditional school sports and activities are still mixed at this point," Dore explains. "This enables more integration before secondary school years, normalising participation."

But on the whole, esports in education presents a unique opportunity for a broad spectrum of children to take part, belong to a community and celebrate their skills. "Not every child has got the ability to play traditional sports, maybe because of physical disadvantages, or locational advantages. So, bring in the team element and take the location and physical aspect away with esports, and they can be part of something. That's a massive inclusivity point," says Horsburgh. "Dell Technologies is working with partners that that have brought out different handsets for people who can't physically use their hands — they might use their eyes, chin, or head instead."

#### Increasing the scope for student engagement

Connecting students from a variety of backgrounds, locations and with diverse physical and cognitive abilities is powerful — as is grouping students according to ability rather than the identifiers typically used in traditional sports, like age or gender. But ultimately, esports in education is about harnessing that passion and enabling students that might otherwise not have the opportunity to shine, to really sparkle.

"There's a student I'll always remember from a college in Cornwall who took part in our original pilot. He is autistic and massively into gaming," Dore remembers, "The college esports team played from a different campus to the one he attended which meant he had to take a 90-minute bus ride on his own, on a route he had never been on before. For neurodiverse individuals like him, taking a step outside his normal routine was very challenging. However, he did it because he was so passionate about playing esports and being part of his college team."

Bringing esports into education also levels the playing field for those from lower socio-economic backgrounds, who may not have had access at home to the level of equipment and software available in schools. It also creates a compelling hook for school attendance, boosting student engagement across the board — particularly among harder to reach students. "It gives them something to come to college for, and focus on something that they're interested in." Maurice continues, "I'm a true believer that attendance is directly linked to achievement. If students are attending their lessons at college, they are more than likely going to achieve their qualification, because they're having that support from their tutors and their peers in that environment. With esports education — and the investment in high-quality systems and the investment in a creative and exciting curriculum framework — we're seeing that engagement and attendance has increased massively on those programmes, from standard educational pathways."



# Elevating the potential for esports in education

There is plenty to celebrate as esports in education beds down, with more schools taking on the curriculum and supporting extracurricular esports activities. But barriers remain, as the push for greater awareness of what esports is and why it is beneficial for students continues. While the survey revealed heartening levels of positivity, it also exposed the work that is yet to be done.

Over 40% of educational stakeholders in the UK believe that parents and children do not know enough about esports in education. This suggests that further efforts are needed to grow awareness around the esports in education opportunity, to enable full support for students and equity of opportunity. Of those resistant to esports in the curriculum, 61% cited a lack of evidence in its educational benefits — representing 11% of the 500 respondents overall. Elevating the potential for esports in education is crucial to securing the benefits equitably, and supporting students with viable, dynamic career paths.



The impact is massive, especially when we think about low social economic areas such as where our school is based. We can actually keep young people off the streets and in education."

Camilla Maurice, Curriculum Manager for Esports, Business and ICT, MidKent College

#### Bringing teachers on the esports journey

Eckhouse believes there's still some demystifying that has to happen about the whole industry, "I used to say this a lot more but there's a lot of like regular people that are professional esports players — they're not these scary people that never leave their basement. They're regular contributors to society that just figured this talent out early and really embraced it. I don't think educators think through all of the things that make it actually a really interesting industry."

Reflecting on the launch of MidKent College's esports programme, Maurice says that one of the barriers they faced was getting students onboard who weren't already gamers. "People don't know enough about what this particular programme is and what this educational curriculum can do for students in terms of their skills development, and their professional development," she said.

"There still needs to be a lot of talk around the increasing student engagement and student attendance on educational pathways that use gaming as its platform. The impact is massive, especially when we think about low social economic areas such as where our school is based. We can actually keep young people off the streets and in education."

Strong advocacy is a part of the solution, from school leadership down and from parents to schools. Dore plays a key role here. As Head of Education at the British Esports Association, he addressed the Headmasters' and Mistresses' Conference for all private schools in order to open their eyes to what esports is and what esports students are really doing. He said, "I do a lot of talks with senior leaders in education. We've also spoken at the Association of Colleges national conference on esports, encouraging teachers to find out what their students already know. To engage on esports and find out what they are doing already, what they're playing and how."

The reality is that 70% of 5 to 15-year-olds played games online in 2020 according to Ofcom's 'Children and Parents: Media Use and Attitudes Report 2020/2021.<sup>10</sup> That number increased to 86% among older secondary school aged children, from 12 to 15-years-old. This was also more prevalent among boys than girls (78% vs. 64%). The report found that boys were also more likely, than girls, to use gaming to connect with their friends. This suggests the provision of esports in education will potentially engage 86% of secondary school pupils through an active interest — benefitting attendance and learner outcomes. Ensuring that educators are aware and in support of providing these benefits to pupils is crucial.

The reality is that **70%** of 5 to 15-year-olds played games online in 2020 according to Ofcom's 'Children and Parents: Media Use and Attitudes Report 2020/2021'.

"It's up to leaders in schools to showcase exactly what esports can contain within the curriculum and school — to make sure teachers are understanding," says Horsburgh. "At a number of schools you'll find there's one teacher advocating, spending months if not years embracing the esports story and going for gold trying to demonstrate the benefits. We need more advocates." Meanwhile, Eckhouse suggests profiling people within the industry to highlight the interesting career paths and the myriad of ways in which this can be expressed — from analyst to marketeer. This should help educators to understand learner outcomes from the grassroots.

### Putting parents in the picture

It is not only educators that need to get with the esports programme. Parents play a fundamental role in supporting their children's education. But Dell Technologies' survey found that over half of UK parents who think that esports doesn't play a positive role in education believe that the content is not relevant or appropriate for education purposes; that it is a distraction from learning methods; and that it will not provide children with real-world experiences. This suggests that more knowledge sharing with parents could be all it takes to see an uptick in support for esports in education.

Helping parents to become more curious about esports, engage with their children's passion and learn what their children already know is key. "This isn't necessarily the school's responsibility, but the school can absolutely enable some knowledge and best practice. I think that it's an active role that they can partake in, which will ultimately help the student. And it'll actually help the parent," says Horsburgh. "But it's making sure that they understand that there is some level of education within each of these games.

"It's about how they can take those interactions, decisions and skills from Roblox or other educational games, and transfer that to creating buildings or architecting the next digital city for example. It's about thinking, why are they doing what they're doing? What are the key questions that they can be posing to their kids to keep it interactive, and keep the communication between parent and child going as well?"

Running open school events for parents to take part and see for themselves is a powerful way to generate better awareness and engagement of esports in education, witnessing students joy, talent and varied skills sets. In building a better awareness, parents can eliminate the fear of the unknown, which is valid when trying to keep children safe. The reality is that gaming at school is structured and supervised, with age-appropriate games. It's also scheduled. With a better understanding of esports and gaming, parents can help children to build healthy gaming habits.

"The British Esports Association partnered with the NSPCC to produce a parent carer guide." It communicates the skills that children are developing, but it also talks about balance, moderation, and understanding what is appropriate and what is not appropriate." Dore explains. But he also highlights the role of publishers and tech companies in supporting parents on this journey.

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<sup>11</sup> https://britishesports.org/news/british-esports-launches-new-parent-carer-guide-in-collaboration-with-nspcc/



# Overcoming barriers to esports in education

Despite the incredible progress made in both the esports industry at large and its integration with school curriculums, barriers still exist — including many of the original barriers such as misperception.

This suggests the level of work yet to be done to overcome industry misperceptions and level the esports opportunity for all students, with proactive education and advocacy at all levels. While this is seemingly inevitable as the industry expands, with skills gaps to fill and children to motivate, overcoming them needs to be a priority. It provides a real-world tool to enable students to flourish in their future workplaces, with the necessary transferable digital, soft and STEAM skills.

#### Expensive equipment stalls esports adoption in schools

In addition, the Dell Technologies survey found that equipment poses one of many barriers for school adoption, with 41% of education stakeholders believe that schools/colleges do not have the facilities for esports equipment. Meanwhile, over half (55%) think esports equipment is too expensive and creates a barrier to implementation. Getting the right kit into schools is an important part of the esports in education equation and the ultimate barrier to adoption.

**41%** of education stakeholders believe that schools/colleges do not have the facilities for esports equipment.

To truly make esports in education a sustainable and enjoyable offering for students, smart investments are key. As connectivity improves, cloud gaming and Gaming-as-a-Service models become more viable providing cost-effective alternatives to large-scale investments in expensive hardware. In sectors like education where funds are limited, esports can drive a welcome opportunity to accelerate digital transformations that benefit all students across an array of subjects. Dore highlights the importance of investing in discrete graphics cards, over top of the range PCs: "They're not just going to help you for esports, but with design, photography, art and computer science — it will improve teaching, learning and boost motivation"

But the benefits of these investments are undisputed. Maurice says, "Where capital can be found to support an investment into esports education, I am confident that we would see an increase in engagement, attendance and life opportunities for young people in local areas. We've been very lucky in that the MidKent College took on board our proposal and our investment. But I know that not all institutions and all schools and colleges will have that same support from their decision makers."

#### Breaking down digital divides

Accessibility poses another barrier to esports in education, with 53% of education stakeholders citing network connections at school/college campuses and home as not being strong enough. Meanwhile, of those education stakeholders who believed that esports should not be taught in school (19%), almost half (46%) attributed this to the fact that not every student will have accessibility to esports at home. This digital divide was fully exposed by the pandemic, as life went online and those without access or devices were isolated. It resulted in lost education for the poorest and most vulnerable students.

The likelihood of having access to the internet from home increases along with income. ONS data reveals that only 51% of households earning between £6000-10,000 had home internet access, compared with 99% of households with an income of over £40,000.12 But this ultimately highlights the important role that school and college campuses play, to help bridge that gap with the provision of open and accessible digital facilities for all. "Using their schools, hardware and internet connection ultimately creates this more equitable way for people to get involved." Says Eckhouse, "Because beyond that, it's internet cafes for many. Educational integration is probably the best way to elevate esports experiences."

Addressing the digital divide means running these types of programmes on students' doorstep, according to Maurice. "By giving them something to come and learn about that sparks an interest, that sparks them to thinking and aspiring to better futures, it helps young people improve their life chances. An esports education enables them to access digital technology and digital education in a different way — even if they don't know how to play any of the games, that doesn't matter." Enabling equitable opportunities for all students is a crucial part of the esports offering, but it's not only down to schools to level-up, according to Eckhouse; "I think that's a dual responsibility for private sector and public in terms of ensuring that they bring this type of curriculum into the school."



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Camilla Maurice, Curriculum Manager for Esports, Business and ICT, MidKent College

Maurice has worked closely with Dore at the British Esports Association to bring the esports BTEC curriculum to her students at MidKent College. She believes more diverse partnerships will help to build out the esports offering. "It could be an education partner, a technical partner, a sport partner, and even working in conjunction with perhaps a local university would allow colleges and schools to put better infrastructure and systems in place."

<sup>12</sup> https://www.ons.gov.uk/peoplepopulationandcommunity/householdcharacteristics/homeinternetandsocialmediausage/articles/exploringtheuksdigitaldivide/2019-03-04

Meanwhile, Dore encourages tech organisations and collaborators to appreciate the limited funding that schools have and to consider the options and solutions that might help to future-proof esports curriculums. "It shouldn't just be viewed in terms of esports," he says, "but also in how it will allow schools to engage in STEM, digital and creative content, to help young people develop skills and knowledge associated with these areas." He is focused on how to enable the long-term development of esports and digital curriculum in school, citing the importance of gaining government investments in grassroots initiatives: "It's critical for the esports industry."

As the world recovers from the pandemic and a sense of normality returns to classrooms, work must continue to connect students to their studies on and off campus. Working closely with the private sector is an important part of this, with expert consultancy guiding educators on how to get the most out of their investments. As-a-service models that move away from CAPEX expenditures are one way to address this. For example, with PC-as-a-service or in the near future gaming-as-a-service models offering greater control over spend, there are workable solutions available.

But this is about more than devices on campus, it's about providing and maintaining superior connectivity in order to sustain increasingly heavy workloads. Down-time disrupts lessons and will hamper student engagement — whether that's an esports, design or science lesson. Laying the foundations of the digital classroom means enabling the workloads of today and tomorrow, supporting new and digitally driven curriculums.

# Coming together for brighter student futures

There is plenty of work to be done to secure the digitally-driven education students need to prepare them for future careers. While the Dell Technologies report demonstrates an exciting level of awareness and curiosity among educators and parents, misperceptions around what esports really is and its educational value still need to be addressed. Parents and teachers must be fully aware of the value esports can have in education, if it is to get the support and investment it needs.

Esports has the potential to be the great equaliser, elevating digital skills and entrepreneurialism for students who may never have had the chance to flourish — and who may not even have been a gamer themselves, initially. It means promoting extracurricular esports, as well an esports curriculum. But this is far bigger than esports itself. It is about preparing students for the workplace of tomorrow.

This is why it is so important that the opportunity is distributed fairly and consistently for all students across the country. Educational institutions play a massive role in driving this and ensuring the standard of teaching is equitable — as with other more established school subjects. But it won't be achieved alone. Knowledgeable parents and smart partnerships will propel the opportunity forwards.

Horsburgh provides a glimpse of the future campus, as he considers the impact of 5G technologies: "The 5G campus will become a reality and actually, it will mean getting another couple of seconds — because it's all about low latency — if you just go straight to 5G, rather than broadband. So 5G is going to be a major player within the gaming industry and as we progress. This will enable greater exploration of the metaverse and ultimately add to the desirability, importance and depth of the esports in education experience for students." The advocacy, investment and progress made today will set the foundations for a much faster, digitally driven education system — fit for student needs in the data era.

#### Find out more

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For more information about esports visit:

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