













Executive Summary

TLDR;

We've delivered over 345 sessions

We've directly impacted over 30,000 students

We've clocked up 1.5m hours of engagement

We've been supported by 1, 133 ambassadors and volunteers

Over 70 organisations have collaborasted with BDF

We can engage 100,000 young people by 2030, but to do this we need you to help us with...



Investment - we need to fund vital skills activity in primary and secondary education



Network - we need as many organisations and schools in the region backing this



Sustainability - we need to make this stand on its own two feet

Why Birmingham Digital Futures?

Over nine in ten businesses say that having a basic level of digital skills is important for their employees, but one in four businesses say that their current workforce lack these skills. It's against this growing digital skills gap that the University of Birmingham is working with key regional organisations to provide long lasting solutions.

Birmingham Digital Futures (BDF) was founded by the University of Birmingham, PwC and Tech She Can (TSC) and is delivered with partners Digital Innovators, Entrust, Ahead Partnership and Tech WM. This collaboration has created a unique, accessible and impactful offer to support individuals across Birmingham, and beyond, to improve their digital skills.

Birmingham Digital Futures aims:

- to help close the digital skills gap in the West Midlands and create a diverse and talented workforce that delivers growth and opportunity for the region.
- to inspire young people to engage in opportunities with industry through careers that use technology, correlating to the demand of the future digital workforce within the West Midlands for various sectors.
- to build confidence and knowledge attainment in the use of digital technology amongst individuals and communities that may not have been afforded quality access to digital engagement and learning opportunities.
- to support the local economy by preparing businesses for the future, through the development of an inspired talent pool supporting all levels of digital skills.

This report showcases the impact of BDF between September '23 and September '24.

What have we delivered?

The below showcases the engagement impact that BDF has been involved in between September 2023 and August 2024.

	Digital Innovators	Tech She Can	Ahead Partnership	Entrust	UoB	All
ingagement Dates	38	86	68	132	21	345
Students Engaged	9,748	11,223	2,379	6,481	260	30,091
ingagement Hours	1,123,248	28,668	4,539	33,826	572	1,490,854
Ambassadors/ /olunteers	14	56	546	497	20	1133

2023			2024								
Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
BDF industrial roundtable		Submiss applica Digital S	s sion of UB2	2 funding	Creation o Education		Ministerial roundtable event	BDF Education Packages	funding proposal	student placement	City Council single settlement proposal

	The BDF Roundtable event officially launched the collaboration of delivery partners between Tech She Can, Entrust, Ahead Partnership and Digital Innovators. The partnership enabled BDF to formulate a lifecycle of interventions enabling the initiative to support in young people receiving digital skills training at all stages of their education lifecycle.
Week	BDF played a pivotal role in the delivery of the Digital Skills Symposium on the Tuesday of Birmingham Tech Week, by enabling circa 60 year 5 students from a local primary school to get access digital skills workshops delivered by BDF delivery partners, as well as welcoming a delegate of 16–18 year olds to engage with the symposium.
Submission of the United By 2022 funding application	The submission of a £300K community funding application through the United By 2022 Commonwealth Games Legacy enabled BDF to create a tangible offer of a digital skills workshop and activity programme.
Digital Skills Pilot Education Programme delivery	The Birmingham Digital Futures (BDF) Pilot Education Program, launched at President Kennedy School, was a ten-week initiative designed as a 'Taster Menu' to engage students with the topline and key foundational elements of technology in the most innovative and highly sought-after sectors.
Formulation of the BDF Education Packages	Whilst the submission of the application for funding through the United By 2022 was unsuccessful, the BDF team utilised the content of the application to create the BDF Education Packages; a comprehensive programme enabling organisations to sponsor schools and colleges to receive dedicated digital skills activities.
Ministerial Roundtable	In April 2024 BDF held a joint roundtable (with TechWM and hosted at PwC) with the then Shadow Minister for Education Seema Malhotra and then West Midlands mayoral-candidate Richard Parker to discuss skills. BDF was joined by business leaders from the region, with representation from large corporates (HSBC, Goldmans and Microsoft) as well as start ups and SMEs. Delivery partners were present.
WMCA funding proposal	An application was made to Richard Parker and the WMCA to secure total or partial funding for large scale engagement across the West Midlands. A proposal totalling £7m was put forward. As of Oct '24 no decision had been made.
Securement of funding towards Education Package	Following the launch of the Education Packages in May, BDF secured their first sponsorship of £12,000 from Northrup Grumman, to deliver digital skills activities for a local primary school.
BDF student placement	Working with the University's Professional Development Module, the BDF team recruited a student on a 14-day placement who supported in establishing BDF social media content
Birmingham City Council Single Settlement application	Through BDF's involvement in the City Council founded Digital Partnership we were asked to put together a proposal focussed on digital skills that would sit in the city council's single settlement ask of national government. BDF put forwards an ask of £6m - which brought Millenium Point on as a delivery partner for the 0-5 age range. As of Oct '24 the full proposal was still being collated by the Council.

Understanding our need

BDF was born out of a series of industry roundtables convened by the University between 2022-23. These discussions, attended by large global corporates, regional SMEs and energetic startups, provided us with the blueprint for the project – what skills were needed, where the gaps were.

In 2023 it was clear we needed to shift our focus to understand the needs and challenges of the students and staff in schools across the West Midlands. This was accomplished through an email awareness campaign, educator survey and networking activities.

Email campaign

In 2024 BDF ran an awareness campaign through three email broadcasts sent via The Education Company. The campaign commenced in Spring 2024, with the second email was distributed in Summer 2024 and the third was sent in Autumn 2024.

The campaign promoted free content and resources to schools, while also highlighting BDF and its partners. Dynamic content was utilised to ensure that audience received tailored messaging and imagery relevant to their roles and school types.

The campaign engaged with **7,900 named contacts** across approximately **1,900 establishments** throughout the Midlands.

What we gained – an engaged database of primary and secondary schools (as well as FE institutions) across the Midlands.

Email survey

The BDF Education survey was created to gain direct feedback from education establishments within the region to understand their demands and needs, as well as the challenges they face when implementing digital skills activities. The results enabled BDF to tailor provisions based on the needs of the education establishments.

The survey was crafted to combine both multiple-choice and open-ended questions, with an aim to capture a blend of qualitative and quantitative data from participants engaging with the email campaign.

Distribution: The survey was distributed via email to over **7,000 education-related contacts** across the West Midlands. The survey targeted key educational roles, including; Senior Leadership Team (Heads, Deputies, Assistants), STEM Roles (Heads, Coordinators, and Teachers), Economics/Business/Computing Roles (Heads, Coordinators, and Teachers), Careers Leads, IT Leads, Heads of Year/Sixth Form and Special Needs Roles.

The collected responses provided valuable quantitative and qualitative data to inform project direction and strategy for product delivery with partners.

What we learned - The survey data provides significant findings regarding engagement and impact in digital skill education for both students and educators.

The survey highlights that digital skills education spans a wide range of key stages, with a particular focus on Key Stage 3 and 4. This demonstrates a comprehensive approach to digital literacy, ensuring that multiple age groups are being taught essential digital skills.

Streams of Interest to Support Students

Teachers express a high interest in supporting their students through various activities, including curriculumaligned content, workshops, events, competitions and career-related opportunities. This underscores the necessity for diverse and engaging approaches to digital skills education that extend beyond traditional classroom methods.

Streams of Interest for Educators

Educators show strong interest in continuous professional development, upskilling initiatives, and funding opportunities. This highlights the need for ongoing support and resources to enable teachers to effectively deliver digital skills education.

Understanding our need cont.

Barriers and Challenges

- Resource Constraints: The high interest in funding opportunities suggests financial limitations that hinder
 educators from taking time out of the classroom and sourcing content/support due to lack of available
 funding.
- Skill Gaps: The demand for professional development and upskilling indicates that educators may feel
 inadequately prepared to teach digital skills.
- Time Constraints: Interest in curriculum-aligned content suggests that integrating digital skills into existing
 curricula may be challenging. There is a need to embed cross-curricular streams that align with curriculum
 topics and standards.

Planning for Opportunities

Educators are actively planning for digital skills integration, although the timing varies. This variation suggests a need for more structured, system-wide approaches to incorporating digital skills education.

Digital Skills Integration

Digital skills in education are taught through dedicated IT and Computing lessons, aligning with national curriculum standards and encompassing courses like GCSE, A-Level Computer Science and BTEC IT.

Additionally, many schools embed digital skills across various subjects, utilizing tools like Excel in Maths and incorporating digital literacy into personal development programs and PSHE curricula. Specialized programs such as the Digital Genius program, iDEA Award and Purple Mash computing scheme further enhance handson digital learning.

Advanced technological integration, exemplified by Apple Distinguished Schools with 1-1 iPads, facilitates continuous digital engagement across all lessons. Schools also link digital skills to career education, ensuring students are prepared for the workforce's digital demands. Regular professional development for teachers supports effective digital education. However, the survey also highlights areas for development, with some schools seeking to further embed digital skills into their curricula.

Support Requests

Several respondents expressed a desire for enhanced professional development opportunities, specifically focused on upskilling staff, including support staff. There was also interest in learning more about funded advanced education programs, such as master's degrees, especially those that align with government initiatives or provide robust digital curriculum support despite timetable constraints.

A notable interest was shown in hosting industry professionals to organize workshops and support school visits to enrich student learning experiences, particularly during events like careers week. Additionally, some respondents indicated a desire for more information on how to access funding for digital education initiatives. partner updates were discussed. This approach ensured a cohesive strategy and alignment with the overarching goals of BDF.

Growing our network

At its core BDF is a partnership between business, academia and educators. This is reflected by our steering group, made up of founding and delivery partners; the University of Birmingham, PwC, Tech She Can, Digital Innovators, Ahead Partnership, Entrust.

However, we know that the digital skills landscape is greater than us, therefore we've strived to be open, collaborative and engaged with relevant organisations in the region who might provide an opportunity, service or activity we don't currently possess. We have built a network of collaborative partnerships who can augment our current activity if needed.

Where do we go from here?

BDF has an immense reach – already engaging with **30,000 young people** across the region in the last year alone. It has made significant progress in enhancing digital literacy, skill development and interest in technology careers among young people in the West Midlands.

It is clear from our partners' research and our own that to close the digital skills gap and deliver systemic change to the region we need to act when children are in primary and secondary school. We need to embed them with the interest and curiosity in technology and digital that will carry them onto to relevant education and career pathways. We need to give them self-belief, confidence and the relevant skills.

This is what we need to deliver this:

Investment – we are working to secure a large-scale investment to develop a pipeline of delivery in schools across the next five years. We need companies and funding bodies to come forward and support activity in schools.

A wider network – we need more relationships with business, charities, educators and other universities, with the whole region backing BDF we know we can deliver the change our young people deserve

Sustainability – we need the public and private sector to be bold and support this initiative to stand on its own two feet. Whether through direct funding or meaningful in-kind support.

Please speak to any of the **BDF partners** if you can support on one or more of the above:

hello@digital-futures.network

https://digital-futures.network



APPENDICES



Meet the Delivery Partners









Tech She Can

Focus: Digital skills lessons and assemblies for 5 – 11 year olds at primary and early-secondary school stages.

Tech She Can is an industry-backed charity focused on inspiring and educating the next generation about careers in technology. Dedicated to increasing the number of girls and women in tech roles, their mission is to ensure that the technology we all use reflects the diversity of its users, ultimately creating a world that works for everyone. Through their Tech We Can initiative, Tech She Can offers free learning materials for educators and parents, empowering young people to become the innovators and problem solvers of the future.

Ahead Partnership

Focus: Digital skills focussed careers workshops and activities for 11 – 16 year olds at secondary school stage to encourage young people to consider careers in the digital and tech sectors.

Ahead Partnership is a forward-thinking organisation dedicated to bridging the gap between education and industry by fostering meaningful connections between young people and professionals from a wide range of sectors. Through dynamic collaborations with industry leaders and educational institutions, Ahead Partnership seeks to inspire and prepare the next generation for the world of work.

Focus: Digital skills focussed careers workshops and activities for 11 – 16 year olds at secondary school stage to encourage young people to consider careers in the digital and tech sectors.

Digital Innovators

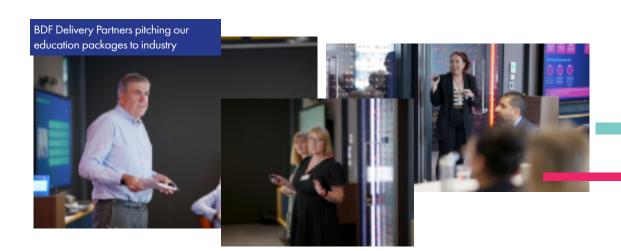
Focus: Enterprising and entrepreneurial employability programmes for 16 – 24 year old at Further and/or Higher Education stages

Digital Innovators is a dynamic enterprise dedicated to empowering young people to thrive in the digital age. By forging strong partnerships with educational institutions, businesses, and community organisations, they cultivate a vibrant ecosystem where young talent can flourish. Digital Innovators' flagship programs, Transition to Work and Ideator, are crafted to bridge the gap between education and employment, aligning with the National Curriculum across the UK's devolved nations while building strong connections with the UK STEM industry. With a mission to equip young people with essential employability skills, these programs offer practical experience, digital literacy, and entrepreneurial opportunities, all of which are critical for success in the modern job market.

Entrust Capita

Focus: Teacher training provisions for educators at primary and secondary school level, and the delivery of digital skills focussed activities for 6-11 years olds at primary school stage.

Entrust Capita's Digital Education and Strategy Service is dedicated to empowering schools and academies with the tools, knowledge, and expertise necessary to thrive in a rapidly evolving digital landscape. Leveraging the firsthand experience of their expert consultants, many of whom have served as teachers and senior leaders within educational institutions, they are committed to transforming education by integrating cutting-edge technology into the classroom. Their mission is to elevate traditional teaching methods through the strategic use of digital tools, enhancing learning outcomes and preparing students for the future.



The BDF lifecycle



Education Packages

In May 2024, the BDF Education Packages were launched. The offer provides an opportunity for organisations to sponsor schools and/or colleges within the region to receive dedicated digital skills learning provisions delivered by BDF delivery partners through six individual packages, enabling organisations to support young people at all stages of an education journey.

Package A	Primary School package (5 – 11 year old)						
	Inspire primary school students with access to interactive workshops and assemblies enabling pupils to get hands on experience of how technology is used across a range of areas including designing and creating toys, digital story-telling, making games with code, coding micro:bits and investigating Al and machine learning.						
	By contributing £10,000 + VAT you can support over 300 young people in understanding the importance of digital skills and how technology is embedded in everyday life.						
Package B	Secondary School package (11 – 16 year old)						
	Enrich the employability prospects of secondary school students in considering careers within technology by enabling them to hear about the career journeys of role models in digital jobs through career panel events, connecting directly with digital employers via speed networking events, mastering the art of successful interview techniques through interview practice workshops and gaining direct exposure to how tech companies operate through workplace visits.						
	By contributing £15,000 + VAT you can support almost 500 young people in gaining exposure to career prospects within the world of technology.						
Package C	Further and Higher Education package (15 – 21 year old)						
	Support young people in bridging education and employment through providing access to 'Transition to Work' and 'Ideator' programmes; bespoke programmes that will enable young people to work collaboratively to provide digital solutions to real-world challenges hosted by industry.						
	By contributing £28,000 + VAT you can support 150 young people to develop employability skills and access valuable work experience through exposure to real working practices and make key employability decisions at an essential career defining stage						
Package D	Primary and Secondary package (5 – 16 year old)						
rackage D	A combination of package A and B, you can enable a primary school and secondary school with access to the insightful and interactive digital skills workshops, assemblies, career panel events, digital employer speed networking events, interview practice workshops and workplace visits to tech companies. By contributing £25,000 + VAT you can support over 800 students in						
	gaining knowledge, awareness and experience of using digital skills and careers within technology						
Package E	Secondary and Further/Higher Education package						
J	A combination of package B and C, you can support a secondary school and college/university with access to career panel events, digital employer speed networking events, interview practice workshops, workplace visits to tech companies, the Transition To Work and Ideator programmes.						
	By contributing £42,000 + VAT you can support over 600 students in identifying career options within the technology sector and defining pathways to make more informed decisions post-education.						
Package F	Full education package (5 – 21 year old)						
	Our full education package will enable you to support young people across all stages of an education journey. Combining all the activities from package A, B and C you'll be able to support students at primary, secondary and further/higher education stages.						
	By contributing £52,000 + VAT you can support over 950 students, from inspiring young minds with how technology is used in everyday life and industries, through to enabling young poorle to use technology to solve real						

industries, through to enabling young people to use technology to solve real

world challenges.