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Boosting Digital Inclusion in Stoke-on-Trent

Discover Digital Evaluation Report

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UK Government

Discover DIGITAL

City of Stoke-on-Trent

THIS IS KEELE

Contents

Acknowledgements

A huge thank you to all project beneficiaries who have fed into the generation of this report. Without your responses to our requests to provide evaluation data, we would not have been able to complete this to support future project work. We wish you all the best in your digital journeys moving forwards and that you continue to get the support that you need.

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1. Summary

To briefly summarise and provide an overview for the evaluation work within this report, summary points for each section are provided below.

Introduction

- ⭐ This section initially sets out the background to the project, including the initial project configuration and organisations involved with delivery.
- ⭐ Contextual difficulties that have surrounded the project are then considered before details are provided on how project delivery needed to change in relation to these difficult circumstances. This included establishing the *Pop-Up Shop* to aid beneficiary engagement, and shorter, *Bite Sized Training* interventions. *Long Training* interventions proved difficult in terms of beneficiary recruitment, which can be related to these contextual difficulties.
- ⭐ Consequently, what evaluation data has been collected and covered in this report has changed from its original intention. Opportunities did not exist for evaluation to inform delivery, and this report is in the mode of an end exploratory evaluation to inform future work of this nature and to aid reflection on project activities. The section then sets out the overall approach to evaluation, data collection, and analysis.

Overall Data Perspectives

- ⭐ Evaluation within this section of the report focuses on the collation of data from all evaluation areas available to *Keele University*, to create a set of overall data perspectives for the project.
- ⭐ The section starts with perspectives that help characterise the beneficiaries, including: postcode districts they are located in; age and gender breakdown; prevalence of disability; economic status; access to technology; and levels of confidence for differing groups. This indicates suitable engagement with several digitally excluded groups.
- ⭐ Data gathering within the area of disability could be improved for evaluation, and available data on older individuals lags behind younger age groups. The latter is likely to be covered more fully in reporting from the *Beth Johnson Foundation*.
- ⭐ The section then covers perspectives on skills development (within digital activity areas and software applications), before then turning to desired areas for improvement. This all indicates useful development within a broad range of skills for

beneficiaries that can be related to local development priorities. These perspectives should also provide a point of reflection for partners involved with project delivery.

Pop-Up Shop

- ⭐ The *Pop-Up Shop* was initially developed and implemented by project partners to address a lack of beneficiary engagement. Contextual difficulties such as the cost-of-living crisis made it difficult to recruit, given more fundamental difficulties beneficiaries were facing.
- ⭐ The shop successfully addressed this engagement need, and partners should be commended for the effort and work that has been put into this.
- ⭐ Alongside the shop providing opportunity to develop shorter, *Bite Sized Training* provision, it also allowed partners to support beneficiaries in accessing *Get Connected Funding* for equipment.
- ⭐ The shop also provided an opportunity to reach beneficiaries that it may not have otherwise supported. The first sign of Ukrainian refugees within the data we have access to was via this project activity.
- ⭐ Evidence exists that shows that attendees found the shop to be useful for their digital journeys and that they continued to use their learning from this in their daily lives. The experience did not significantly boost their confidence with technology, and this would need to come from more sustained interaction with beneficiaries.
- ⭐ This has provided a relevant intervention that could be expanded on in future project work, to underpin and support other project activities.

Get Connected Funding

- ⭐ This element of the evaluation covers the funding stream that was setup to address a digital divide based upon access for digitally excluded beneficiaries. Applicants could apply for technology equipment and software, as well as internet connectivity. This has provided *Keele University* with the largest dataset for evaluation.
- ⭐ This has been a successful element of the project, which has had difficulties associated to delivery. Difficulties included the provision of internet connectivity, where it was not possible to supply broadband connectivity. These issues were beyond the control of partners and need to be addressed at a structural level.
- ⭐ Evidence shows that approved applications were suitably targeted to excluded groups and the supply

of equipment has positively impacted on confidence levels for beneficiaries.

- ★ Many beneficiaries within the data set solely own a mobile phone for accessing the digital world. This is far from ideal for a variety of activities (including developing skills for employment and finding work), which indicates a great deal of need for equipment access.
- ★ Although access alone cannot solve digital exclusion and develop active and positive media literacies, good evidence exists to show that access has provided opportunity for beneficiaries to support their own skills development within the home and the community. This has made a huge difference to the lives of individuals within the project.
- ★ This provides an important first step to the digital journeys of many, where they have time and space to explore and discover what their needs are.
- ★ Needs can be found within the analysis of skills, and it is important that project work looks at contextualised possibilities for addressing these through support and training.
- ★ Overall, this element of the project has clearly fed into the priorities for Stoke-on-Trent and has significantly helped to address issues of exclusion.

Training

- ★ Given the problems identified within the project, training provides a limited dataset for evaluation. This can be related to difficulties with running *Long Training* interventions and it not being as feasible to collect data in shorter and more informal *Bite Sized Training* formats.
- ★ Data has been collected on one *Long Training* intervention provided by *Caudwell Children*. This represented a very focused provision on 16–24-year-olds with disability, which was primarily focused on developing employability. This serves as a case study on the power of this form of training when it is feasible to do, and demand exists.
- ★ When considering the beneficiaries participating within this training, they can be characterised as being in a better position to engage with and take advantage of training in this mode, when compared to other beneficiaries within the dataset.
- ★ There is strong evidence of skills development, and the open socially constructed nature of the programme provides good, contextualised conditions for developing media literacy.
- ★ Data is also considered from shorter *Bite Sized Training* interventions, which also indicates useful skill and media literacy development from the

provision. For those who are at the earlier stage of their digital journeys and face higher levels of digital exclusion, this represents a better starting point.

- ★ Although the data evidence here is lighter, it does show a useful engagement with beneficiaries that feeds into priorities for the region, as well as addressing digital exclusion.

Conclusions and Recommendations

Overall, the project can be considered as successful in addressing digital exclusion within the Stoke-on-Trent region under difficult contextual circumstances. The evaluation then moves to a series of recommendations that can support further project work of this nature.

Headlines for these recommendations are provided in the list below, which are expanded on within this section and relate to the evaluation work undertaken:

- ★ Establishing the *Pop-Up Shop* as a cornerstone to project work for the digitally excluded
- ★ Access to technology for the digitally excluded needs to come early
- ★ Create a mix of *Bite Sized* and *Long Training* provision to meet the needs of individuals, that connects well with their developing needs
- ★ Signposting to wider support within the local area and beyond is needed.
- ★ Partners should spend time reflecting on skills development within this evaluation, to consider how project work could be configured in the future.
- ★ More funding, time and resources are needed for project work such as this, to effectively address digital exclusion within the local area.
- ★ Difficult commercial circumstances need to be addressed within equipment supply.
- ★ Improve the granularity of evaluation data collection and find alternative ways to evaluate development of media literacy.
- ★ The project partnership should consider how work with certain groups can be further developed, based on presented evidence.

2. Introduction

This section of the evaluation report provides key information relating to the background and delivery of the project, which can be related to national and international contexts. These contexts are discussed within this section after introducing the project, which help to explain the importance of work conducted and some of the necessary adaptations within project delivery.

Bearing in mind these adaptations, information is provided within this introduction on what the report covers, as well detail on evaluation methods used. Evaluation work conducted by *Keele University* utilises a *Theory of Change* approach, which is further discussed in this section. As such, this evaluation work is not focused on generic modelling of need or whether project outcome targets have been met, rather it is considering what change can be identified for project beneficiaries from their involvement. Considering how change has manifested for individuals from data collected does allow for the consideration of possible future work, which is further discussed within the main analysis sections that follow this introduction.

2.1 Project Background

In May 2021, *Discover: Boosting Digital Inclusion in Stoke-on-Trent* submitted a successful application to the UK Community Renewal Fund (Gov.uk 2021a) to address digital inclusivity within the local area. With the project originally scheduled to run between August 2021 and March 2022, it aimed to engage with a range of the most digitally disadvantaged and excluded members of the Stoke community identified by project partners, which can be separated into the following broad (and sometimes overlapping) groups:

- ⭐ **Young people** who are either **under 16 or within the 16-24 age range**, needing support in basic digital skills for life, employment, and online safety. Before starting the project, partners had identified that

disabled individuals within this category particularly needed support with employability.
- ⭐ **Adults and parents** within the **16-64 age range** who require the same types of personal support as young people, but also need to support their own children and families in using digital technology. Project partners identified that parents have concerns about understanding and connecting with their children's online activities.
- ⭐ **Older people** who are **65 years or above** who have the need for basic digital skills development for addressing a variety of needs, such as online safety, loneliness / isolation, and general wellbeing.

To support these groups of beneficiaries, the project had a primary aim of developing confidence, knowledge, and skill capabilities to access digital support and services in their daily lives. Developing a capacity to stay safe online, whether this is personally or to support family life, also featured as a project aim. This can be considered as a key element of building confidence in using digital environments. To fully understand needs of these groups, active participation of beneficiaries and community partners formed a cornerstone for project activities.

Overall, the project aimed to support 772 individuals to increase their digital knowledge and skills, with a starting point of entry level understandings, which could then develop beneficiaries towards taking specialist qualifications for employment. As many digitally excluded individuals lack the financial capital to purchase suitable devices and internet connectivity, financial support also fell within the project remit to support development. It was hoped that the project would also be successful in addressing issues of health and wellbeing, by increasing the possibility of interaction with others, access to services, and the removal of digital barriers.

Alongside these areas of beneficiary skill and knowledge development, the project aimed to develop understanding of local needs, giving an exploratory and evaluative purpose to activity. This could inform future project work and the configuration of digital services within the local area. As such, the intention was that organisations attached to the project could use this as a learning experience, which could then be shared more widely to other organisations and individuals to enhance digital inclusion within Stoke-on-Trent.

Overall, the project has a strong connection with three or the four priorities outlined within Stoke-on-Trent's *Powering Up* agenda (Brown 2021). With the training offered via the project, this has a direct link with education and skills development for employment (priority 3), and this in turn connects with economic development (priority 2) in terms of upskilling the local workforce. With the project also aiming to address issues of health and wellbeing, this also aligns work

carried out to priority 4 – health and productivity. Although the project was designed to operate city wide, the intention was to have a particular focus on the North of Stoke-on-Trent, due to the high levels of deprivation encountered there. Chell Health and Feggs Hayes were identified as particular 'left behind' areas of concern.

The *Powering Up* Stoke-on-Trent prospectus was generated to primarily support economic development in the wake of COVID-19 upheaval, and issues surrounding the pandemic have also impacted on project delivery. National issues such as COVID-19 and how the project was eventually delivered can be found in later subsections, and what now follows is a brief introduction to intended delivery with project partners.

2.2 Initial Project Configuration and Partners

With the project originally intended to run for an 8-month period between August 1st 2021 and 31st March 2022, the broad intentions and wide scope of beneficiary age groups (with diverse needs) represented an ambitious project for delivery. What follows in this subsection are the intended project activities and details on organisations involved within the project partnership.

Community Engagement and Research
To underpin an approach that met the needs of the digitally excluded within the Stoke-on-Trent area, peer research activities and mini enquiries were expected to start early and would continue to inform work throughout the project life cycle and beyond. The intention behind these elements was to provide opportunities for beneficiaries to actively participate within the project, to effectively meet need within the local community.

Peer researchers would have the opportunity to advise partners on approach during the project life cycle from beneficiary experiences, and individuals from each of the target project groups would be encouraged to take on these roles. These peer researchers would then also help to expand the reach of the project for groups they were active within, as well as promoting digital inclusion and safety for other individuals they were in contact with. This approach could then be of benefit in accessing hard to reach groups, such as non-English speakers and those who feel intimidated by others that may be seen as being in a position of authority. It was hoped that these individuals would then also remain active within their community groups on project completion, and legacy training would be provided to support this.

The main intention behind the mini enquiry project strand was to provide understandings of how people choose to access a

range of digital services - including mental health, welfare, and a range of wider community services. For these mini enquiries it was also important to understand why individuals choose not to access certain services online. These understandings could then be used to inform future spending and help to establish a strategy that meets local needs. Although these mini enquiries would be supported within the project partnership, peer researchers would have a role in formulating the themes covered by these.

Finally, the project hoped to support several digital champions within the local community to improve the impact and reach of the project through their community engagement. Their role within the project would primarily be one of encouraging wider beneficiary involvement to develop knowledge and skills and provide ongoing support within community groups that they are active within. These individuals would then also receive training to understand and respond to digital safety issues and concerns as they arise from community engagement. It was hoped that digital champions would be recruited from each of the core beneficiary groups mentioned in section 2.1 of this report.

Knowledge and Skills Training
A key project deliverable in reaction to community engagement and research was the provision of training to support the needs of beneficiaries. It was expected that training would represent the main starting point for beneficiaries' digital development and would be provided by a range of project partners within programmes lasting for several days. Although the exact configuration of these training programmes would be informed by community engagement, several areas were pre-identified before the start of the project. This included supporting young people in online safety; training parents to support their children to stay safe online; supporting younger beneficiaries who are not engaged in education, employment, or training; and supporting issues of employment more widely in terms of skills development.

Get Connected Funding
Out the back of training provision, it was expected that beneficiaries would be identified where access to equipment represented a barrier. For beneficiaries, it would be important to supplement learning at home with their own devices during a training programme, and equipment would also be needed to cement learning into their daily lives once training was completed. Clearly, if a beneficiary did not have access to equipment, training would be unlikely to have any lasting benefit.

To support individuals where equipment access represented a barrier, the *Get Connected Funding* stream was established. Beneficiaries would need to apply for their

desired equipment and include a supporting statement from a referee. Applications would then be considered by the project partnership every month for approval before equipment could then be supplied to a beneficiary. Digital equipment could include devices such as a laptop or a tablet, and internet connectivity for going online.

Community Innovation Grants

Another expected strand of funding was the Community Innovation Grants to support community and voluntary organisations to run digital inclusion projects within their community groups. Grants were available for up to £5,000 to run a community project, which organisations needed to apply for. These applications also went through a project partnership approval process to consider fit with the intentions of the project overall. It was expected that this type of funding would support working with hard-to-reach groups through the funding of grassroot initiatives.

Project Partners

The project was originally formed around a collaborative network of 12 partners from public, private and third sectors who are already involved with delivering services to the local Stoke-on-Trent community. These organisations are outlined below, with a brief note on their intended responsibilities within delivery.

⭐ **Staffordshire University –** contract oversight; encourage participation of beneficiaries through peer research and action learning programme; adapt a successful cyber champion programme for community use; provide access to a range of digital skills programmes; and provide access to digital facilities on campus.

⭐ **VAST –** link between the project and the wider Voluntary, Community and Social Enterprise (VCSE) sector; facilitating wider engagement with project aims; support delivery across the project membership; and project promotion.

⭐ **Beth Johnson Foundation –** recruit, train, support, and host volunteer Digital Champions of all ages; and work with groups of people over 55 years in age to understand and support those that are digitally excluded.

⭐ **The Community Foundation for Staffordshire –** Management and distribution of funding. *Get Connected Funding* for individuals (equipment, software, and connectivity); accessibility funding to reduce barriers to participation such as childcare and transport; and Community Innovation Grants, to support community organisations to deliver interventions to beneficiaries in their care.

⭐ **Stoke-on-Trent College –** deliver training and support for parents/guardians of children and young people who are digitally connected.

⭐ **WEA –** delivery of engagement sessions for community awareness and involvement with digital skills; provision of easy access learning opportunities; and targeting socially isolated individuals for project involvement (such as non-English speaking individuals and those with disabilities).

⭐ **Wavemaker –** provision of bespoke training for individuals who are looking for specialist digital roles and support.

⭐ **YMCA Stoke-on-Trent –** delivery of co-designed online safety workshops for young people aged 10-25, and delivery of a social action campaign for online safety within the city.

⭐ **Caudwell Children –** delivery of a 10-week employment programme for young people (aged 16-24 years) with Special Educational Needs and Disabilities (SEND)

⭐ **Stoke North Big Local –** using existing outreach programmes, extending delivery into the most digitally excluded communities.

⭐ **The Dove Service –** connecting people at risk or experiencing mental health issues with the project and supporting mini-inquiries into the use of mental health services online.

⭐ **Keele University –** Independent evaluators of the project, using *Theory of Change*.

After delays to the start of the project, which can be associated to some of the national contexts covered within the next section, the *WEA* had to withdraw from their intended involvement as a project partner. After discussing these national contexts in section 2.3, further detail is then provided on how the project was delivered in section 2.4.

2.3 National Context, Digital Inclusion and Stoke-on-Trent

The local *Powering Up* agenda (Brown 2021) produced for addressing local economic issues within Stoke-on-Trent provides a relevant starting point for considering how national issues have influenced and impacted project delivery, as well as the lives of beneficiaries that the project has attempted to engage with. The published prospectus highlights that before COVID-19, the area was undergoing its most significant transformation in economic fortunes for 30 years, but these national pandemic problems have resulted in economic difficulties. For example, the prospectus highlights individuals claiming Universal Credit in the area 'has increased from

16,320 to 29,448 persons - from 10.2% to 18.4% of the working age population' (2021: 8). This indicates that families have slipped into financial insecurity due to the pandemic, but these difficult circumstances can also be linked to other UK contexts.

Webber and Hill highlight that the pandemic 'exacerbated an already challenging situation for many families' (2022: 15), with an extended period of national austerity that has impacted on the value of social security payments. Consequently, children within families that rely on these payments are likely to be living in poverty, with families having to support health conditions and disability being at greater financial risk. These issues have been further compounded by an increased reliance on the digital administration of social security applications and payments, which can make processing difficult for the digitally excluded. This can then lead to increased levels of anxiety for a claimant in already difficult circumstances (Robertshaw et al. 2022: 36), impacting on the overall wellbeing of an individual. However, despite these difficulties it should also be recognised that during the pandemic (and any further lockdowns that might occur) this may represent the only viable means of processing social security payments, emphasising the importance of providing digital support for financial security.

Economic issues and austerity for families can also be linked to the emergence of insecure working arrangements for a range of employment contexts, primarily impacting on low skilled workers. These arrangements do not necessarily provide the financial security to cover all household costs, which has led to a rise in individuals in food poverty that need to access food banks. For government and policy, this emphasises the need to address structural determinants for those who are struggling, and the need to revise social policy in problematic circumstances (Lambie-Mumford 2019: 13-14). These difficult working arrangements have now been further exacerbated by the pandemic, with many families suffering from employment instability and loss of work (Webber & Hill 2022: 18), which potentially requires these individuals to find new forms of employment for financial security.

These structural determinants are now further complicated, with the war in Ukraine representing a particular global issue that has contributed to the cost-of-living crisis and has introduced further issues of poverty and exclusion within local communities. Whilst the UK government is providing support to households to cushion the increased financial demands for heating homes (Gov.uk 2022a), it can be argued that these do not go far enough to support already financially pressured households. Age UK highlights that this poses a particular risk for older households in fuel poverty (2022), and

arguments are now emerging that support needs to be provided via an increased level of targeted measures to aid the most vulnerable (Dender et al. 2022). With the current UK approach now set to support all households until March 2023, new measures will need to be carefully thought out to support the most vulnerable. Concerns have led commentators to suggest that up 11 million additional British households may find themselves in fuel poverty from April 2023 onwards without the right help being put in place (Pickard and Plimmer: 2022).

The war in Ukraine has also contributed to the cost-of-living crisis for individuals in terms of food affordability and high street prices more generally. Sweney (2022) highlights that the war, coupled with a tight labour market, rising energy costs, and global commodity prices have all contributed to high rates of inflation significantly pushing up the cost of food. The British Retail Consortium Shop Price Index (SPI) has reported a record shop price inflation increase for food and non-food items during September 2022, since the index was first established in 2005 (BRC 2022). The war has also impacted fuel costs this year for household transportation and transportation of goods, exacerbated by the weakness of sterling. A recent House of Commons research report highlights that the UK has the fifth highest diesel prices when compared to the rest of the EU (Bolton 2022: 14-15), and it is likely that further fuel price volatility will be experienced moving forwards.

Although inflationary pressures can be associated to the war in Ukraine and the pandemic, it is also important to recognise that these issues can be historically linked to Brexit (The Economist 2021). The establishment of the UK Community Renewal Fund that this project has been funded by can be seen as a direct consequence of separation from the EU (Gov.uk 2021a), and the lack of access to structural funds to support struggling areas. Whilst the intentions of these funds to go beyond what has been previously supplied via the EU are laudable; political and economic uncertainty mean that the levels of support that these programmes are able to deliver is not set in stone.

With the national contextual factors discussed so far contributing to inflation and the cost-of-living crisis, this has resulted in the Bank of England attempting to control the economic climate via interest rate rises. At the time of writing this report, the most recent rise has lifted interest rates to 3% (Bank of England 2022), which has put greater financial pressures on mortgage repayments and individuals who have taken out financial loans. With wages not increasing in line with these inflationary pressures, many working households have very little financial capital to spare. Clearly, contemporary financial pressures are broad and significant, causing issues for individuals that need to prioritise survival

and getting by. This leaves little financial capacity or time for those excluded from digital life to address this situation.

These difficult circumstances can be directly linked to issues of risk within digital environments, with circulating scams exploiting financial vulnerability for individuals. One of the most recent iterations of these relates to fake electronic messaging that claims to be from the UK government for making energy payments, when these are automatically applied to energy bills (King 2022). Misinformation and disinformation can also be linked to the national context in terms of pandemic difficulties, in terms of information circulating online that has resulted in conspiracy theories and vaccine hesitancy (Christie 2021). These issues of digital risk are now beginning to be addressed via the recent online harms white paper consultation, and the subsequent publication of a draft online safety bill (Gov.uk 2020). This emphasises the role of media and digital literacies alongside the development of skills within the UK population, connected to the publication of an Online Media Literacy Strategy (DCMS 2021).

Within these governmental publications several areas of risk and online safety are explored, which includes data and privacy, controlling illegal online content, codes of practice, critical understanding of online environments, consumption of information, managing harmful content for children, as well as online abuse and consequences of online actions. It is beyond the scope of this evaluation to consider this very broad and convoluted area in detail, but it is relevant to draw out discussed barriers to improve an individual's media and digital literacy, which can be directly related to the intended beneficiaries of the project. In relation to this, the DCMS Online Media Literacy Strategy highlights the following factors that act as barriers for individuals (2021: 6):

- ⭐ **Limited Online Experience -** users who spend less time online have less opportunity to apply and practice media literacy knowledge and skills. This is especially likely to impact those over the age of 65, and children if parents excessively control screen time.
- ⭐ **Barriers to Accessing Technology -** some user groups have limited access to the internet, for example, those from lower socio-economic backgrounds, or disabled users without accessible technologies.
- ⭐ **Limited Access to Education –** some users are excluded from mainstream education where they may have access to media literacy education. This is particularly prevalent for disabled users with special educational needs.
- ⭐ **Users who are vulnerable to disproportionate abuse -** these users need to be supported and

upskilled in the areas of media literacy that can protect them online.
- ⭐ **Vulnerable Users -** users who are already vulnerable to certain harms online need strengthened media literacy skills in those areas.
- ⭐ **Inability to critically evaluate information -** 40% of users do not have the skills to critically assess online content and need to be upskilled.
- ⭐ **Online Application of Media Literacy -** all user groups struggle to apply media literacy knowledge and skills to the online environment and need support to do so.

As the prior discussion of the intended project configuration illustrates, the intended intervention within Stoke-on-Trent goes some way to addressing barriers highlighted by the DCMS and supporting with issues of risk and online safety. For vulnerable and marginalised individuals within society, it is important to also note that perceptions of risk associated to digital and online environments may also act as a barrier to use, and lead to a preference for offline ways of working and living to completely mitigate against this. However, this focus on risk needs to be counterbalanced with beneficial uses and interactions that can be enabled by digital environments.

The government response to the white paper highlights potential for the digital economy to support economic growth and prosperity (Gov.uk 2020), which is echoed by Stoke-on-Trent's *Powering Up* prospectus referred to at the start of this section (Brown 2021). The UK's Digital Strategy helps to emphasise this point (Philip 2022), in terms of new job possibilities within emerging fields such as artificial intelligence and semiconductor design, as well as its intentions to become a global science and tech superpower. As the digital strategy highlights, skills and funding development are required to achieve this aim, and we would suggest here that it is important to ensure that exclusionary gaps do not further widen because of this agenda.

The positive use of digital technologies for employment and work can also be extended to addressing pandemic lockdown issues within society, and the use of the digital to allow society to continue to function. Working scenarios inevitably had to turn to digital enablement for communication and collaboration, and educational contexts had to turn to online platforms to ensure the continuation of educational programmes. For the latter, this has produced concern that vulnerable households that lack capacity to engage with online education are most likely to be the hardest hit within communities, and the need for grassroots initiatives to address these issues (Cerna, Rutigliano and Mezzanotte 2020). The turn to digital for work scenarios highlights the need for digital competency development to enable possible employment in a variety of sectors, given that homeworking

has persisted after pandemic lockdown (ONS 2022a). The ONS also highlights that those finding employment with these competencies are likely to benefit from a 3-10% increase in earnings (Serafino 2019).

Health and wellbeing issues can be associated to pandemic restrictions, which has led to the view that these can be considered as the second silent pandemic, further exacerbated by the current global difficulties. Webber and Hill (2022: 27) highlight that face-to-face service provision was extremely limited during restrictions, where certain groups found online support challenging and needs remained unmet. However, we would agree here with the government view that technology can provide benefit in terms of its ability to address issues of wellbeing and isolation, by 'supporting people to stay in touch with their friends and family' (Gov.uk 2020). Clearly, a gap in skills and competencies exists here to enable these benefits, whether this is for local community and family support to create positive interactions in difficult times, or whether this is for community engagement and dialog that helps to encourage wider discussion on the big issues experienced within society (Schiavo 2021).

Alongside the above beneficial elements to digital competencies and media literacy in terms of employment, health, wellbeing, and community engagement; it is important to also highlight how digital environments can be used to alleviate financial burdens within a cost-of-living crisis. The ONS highlight that shopping online is on average 13% cheaper than shopping in-store (Serafino 2019). The same report also highlights that an estimated 30 minutes per transaction can be saved from utilising online banking, which can now be increasingly attached to claiming benefits from earlier discussion.

As this section is now starting to draw out, issues of risk and benefit are far ranging, complex, and interlinked. Whilst it is impossible for this report to discuss the entirety of these issues, the discussion here does provide an initial perspective on national contexts that impact on the lived experiences of the digitally excluded within Stoke-on-Trent. Given the complexity, it is important that space and financial support is found to support community projects such as *Discover Digital*. It can be argued that the only way these issues can be addressed is via organisations that understand local needs of differing excluded and marginalised groups. This allows for a meaningful address of skill and competency gaps, as well as required literacies, in relation to needs that can vary between differing groups within Stoke-on-Trent. These national contextual difficulties for the digitally excluded have also impacted on the delivery of the project, and the subsection that now follows highlights how it became necessary to alter the approach to project delivery.

2.4 Project Delivery

With the difficulties discussed in the previous section of the report in relation to beneficiaries, it was not possible for *Discover Digital* to deliver in the way that was intended (discussed within section 2.2). Due to delays to the start of the project which can be associated to pandemic restrictions and a delayed project application notification, the first board meeting for the project did not take place until the end of November 2021. As the project got off the ground, it became necessary for the intended delivery to be modified to cater for the circumstances surrounding beneficiary engagement. This section summarises these necessary modifications to delivery, to ensure that the project could be completed.

Project planning initially considered forms of longer training for beneficiaries as the key starting point for involvement in the project. It was expected that during this initial engagement, individuals that lacked access to necessary equipment and connectivity could then be directed to completing a *Get Connected Funding* application. However, partners struggled to engage with intended beneficiaries, and this can be directly linked to the problematic contexts discussed in the previous subsection. Individuals and households struggled to find time to engage when basic household needs and priorities were proving difficult to meet. This lack of engagement from intended beneficiaries resulted in the *WEA* withdrawing from the project as a partner, due to the concern they had for meeting targets.

Consequently, project delivery was adapted to engage with and meet the needs of individuals. To support beneficiary engagement with the project, a new element was needed to give a physical presence to the work of *Discover Digital*, which would help to engage hard to reach beneficiaries. To meet this need, a *Pop-Up Shop* was established within the Potteries Shopping Centre, with planning taking place via project meetings from February through to April 2022. The shop was officially launched on April 23rd and was available to the public and potential beneficiaries until the end of May. 191 significant interactions with members of the public were reported back to the partnership during meetings. In terms of these interactions, the shop space gave opportunities for: training partners to provide shorter, ad-hoc and bespoke training to meet the needs of individuals; general advice on digital technology; and support to individuals in making applications for *Get Connected Funding*, when it was appropriate to do so.

Before the establishment of the *Pop-Up Shop*, applications for both *Get Connected Funding* and the Innovation awards were steadily increasing, but a noticeable jump in *Get Connected* applications was observed due to this new element of project activities (122 applications were received

for approval in June 2022, compared with 39 approvals before the shop was established in April). Applications continued at this increased level until the end of the project, and there seems to have been a snowball effect in terms of applications as word of mouth spread. As such, *Get Connected Funding* became the lead project offering, and this is where the bulk of the evaluation data lies for this report.

Given the difficulties encountered with establishing longer training programmes for the project and the time commitment required by possible beneficiaries, a different strategy was required. Although the *Pop-Up Shop* was successful in terms of beneficiary engagement, this had not translated across to increasing numbers on longer training courses. As such, shorter and less formal *Bite Sized Training* interventions (lasting less than a day) were established to aid engagement with training. Although evaluation mechanisms were put in place for these, it was not always possible for training providers to use them, given the more informal and shorter delivery contexts. The consequence of this shift for the evaluation is that there is only a limited dataset available to *Keele University* to evaluate this element of the project. All other core elements of the project discussed within section 2.2 remained intact as intended. This includes peer research to inform the configuration of the project, mini enquiries, the Digital Champion's programme, and Community Innovation Grant Awards.

In terms of the appropriateness of the initial design of the project, the above would indicate some problems with the expected delivery, which required the introduction of a new project deliverables and re-orientation of training provision by providers, but it would be unfair on the project itself to see this as a significant problem with the design. The configuration in relation to project partners was a familiar route to beneficiary engagement, but significant national contextual difficulties existed that meant these normal routes to engagement were unsuccessful. These difficulties could not have been catered for within the planning phase of the project. The ability of project partners to flex to the needs of beneficiaries should be commended and provides valuable insight for any further project work.

2.5 What This Evaluation Report Covers

Given that this report is framed by a *Theory of Change* approach (further detailed in the next section), and the main purpose of the project is to develop skills and competencies for digitally excluded groups, the focus of this evaluation is to consider elements of the project in relation to what change can be identified in beneficiaries in terms of digital skills and

competencies. The report can also be considered as having an exploratory purpose to inform future work.

Given the difficulties and changes with the project, what is covered has also been subject to change. The original intention was that independent evaluative work would be ongoing throughout the project life cycle and would then be used to monitor and support any necessary re-orientation of project deliverables to meet outcomes. However, given the earlier problems with engaging beneficiaries and the lack of data to base evaluative direction on within the project life cycle, it was not possible for this to become a feature of project delivery. However, evaluative work conducted here based on data that has been collected and processed towards the end of the project is in positioned well to explore project deliverables and make recommendations for future project work in Stoke-on-Trent for digital exclusion.

Alterations to the project and the modification of timescales have also meant that it has not been possible for this report to cover all elements of project delivery. As such, it was agreed that a range of elements would be reported on separately from the *Keele* evaluative work. This includes all elements of community engagement and research – namely the Digital Champions programme, mini enquiries, and peer research. All these project elements will be subject to separate reporting and evaluation by project partners involved with their delivery. Although the Community Innovation Grants were delivered during the project, no data is available to us to enable reporting in this area.

All other core elements of the project are reported on here, including *Get Connected Funding*, training that has taken place where it was possible to collect data, and data that was possible to collect in relation to *Pop-up Shop* experiences. Out of these three areas, *Get Connected Funding* represents the most significant dataset, where it has been possible to gather data from 154 beneficiaries after being approved for funding, supplemented by 45 evaluation responses at the end of the project to gauge what impact the supply of equipment has had. Given the compressed timescales and having to maximise time with equipment before conducting an end evaluation, this figure of 45 beneficiary responses at the end of the project could have been improved if further time had been available. Most of these end evaluations were collected at the end of July through to mid-August 2022, which does mean that those funded for equipment towards the start of the project are more likely to report a change in skills and competencies than those who had their funding approved at a later stage. It is also important to note that postal strike action also hampered the return of these evaluations, where beneficiaries had requested to complete these in hardcopy. Nevertheless, this has provided a strong

basis for the evaluation of individual equipment funding, and this is reflected in the length of its treatment within the report.

For the *Pop-Up Shop* and the 191 significant interactions reported in project meetings, an initial dataset of 94 beneficiaries was handed over to us for evaluative follow up. Out of this initial provision of data, 20 evaluation responses were received that have been worked with in this report. As skills development in this evaluative context was only relevant for those who were not providing this data in relation to *Get Connected* evaluations, only 8 of these carried data on the development of digital competencies. Given the diversity of the shorter, ad-hoc training and support delivered within the *Pop-Up Shop* context and this limited dataset, this data has not been used in this report as the perspectives provided would be a little misleading. As such, evaluative work in this area focuses on the initial data provision of 90 beneficiaries, and data that can be related to the 20 responses mentioned above.

For *Long Training* interventions, it has only been possible to gather data in relation to a longer (more than a day) employability training intervention delivered by *Caudwell Children*. This is due to the reconfiguration of training resulting in many of the longer training programmes being abandoned. For this element of the project, 12 evaluations for a particular programme cohort have been provided, which includes data collected at the start of training, as well as data collected at the end of training provision. This allows the evaluation to consider change in skills and competencies in relation to this employability provision. It has also been possible to gather some data on shorter (less than a day) *Bite Sized Training* interventions, which is also presented in this report. This provides a limited perspective on this type of provision from three partners, where is has been possible to collate and work with 26 evaluation responses. For these training evaluations a shorter one-off form of evaluation was created where the data was gathered once training was complete. The ad-hoc and truncated nature of this type of training has meant that it was not always possible for providers to ensure that these evaluations were completed, which helps to explain the lower level of responses to work with in this evaluation.

Finally, it was hoped that data on outcomes would be provided for consideration within each section of this report, but unfortunately finalised data was not available in time for inclusion and consideration by *Keele University*. As such it is recommended that these outcomes are looked at and considered in relation to the evaluation perspectives that are provided here.

2.6 Approach to Data Collection and Analysis

The overall framing of the evaluative work conducted by *Keele University* is provided by a *Theory of Change* approach (Rogers 2014), which can take work of this nature beyond a simple reporting of outputs that struggle to go beyond 'black box' thinking (Laing & Todd 2015). Here the approach necessitates a focus on the meaningful evaluation of change (in this case a change in digital skills and competencies) that reflects the lived experiences of project beneficiaries. As such, the national context discussed earlier provides a crucial element of evaluating and thinking about the data collected and reported on.

To further define the *Theory of Change* approach taken here, it can be considered as aligning with multiple dimensions of the typology produced by Laing and Todd (2015: 4):

- ⭐ **Deductive Model –** In terms of following the understandings of local practitioners in how the world works and what will provide the best chance of success for developing beneficiary skills and competencies. In relation to this deductive element, a hypothesis has been formulated to consider change in skills, which is further discussed below in relation to analysis.
- ⭐ **Inductive Model –** In terms of broader exploration and consideration of the project elements in relation to skills development, to reflect on how these have been implemented within the difficult contextual circumstances surrounding project delivery. These inductive and reflective views should be beneficial for future project work on digital exclusion within the local area.
- ⭐ **Collaborative Model –** This is reflected within the formulation of the project, in terms of community engagement and research to channel project activities, and the necessary focus on the expertise of practitioners from organisations in the local area who are involved with project delivery.

This formulation of this *Theory of Change* has not included project planning, and as previously discussed, work conducted here has not had the opportunity to influence delivery during the project lifecycle. As such, it is orientated towards inductively and deductively reviewing the delivery of the project, where areas of expected change can be explored, and emerging issues can be inductively considered and discussed. This is primarily an end impact evaluation, which can provide a perspective on lessons learnt during the project (Rogers 2014: 3). Data collected from *Keele's* evaluative work represents a focus on quantifiable survey

data for considering change within skills and competencies, alongside open-ended qualitative comments on elements of the project where these are available. This qualitative data helps to further understandings of quantitative analysis, as well as helping the evaluation inductively consider future project work.

The starting point to defining the *Theory of Change* embedded within this project can be related to the configuration and delivery of project elements listed and previously discussed. In terms of project partners and conducted community consultation, these elements were considered as providing the best opportunity (or steps) to develop a change in skills and competencies for beneficiaries. As the realities of project delivery have highlighted, this initial configuration experienced problems, which then required a reconfiguration of project elements to develop meaningful change for beneficiaries in difficult contextual circumstances.

To further think about and discuss digital skill and competency change in relation to the project work conducted here, it is useful to turn to a recent research article by McDougall and Rega (2022). The article discusses a *Theory of Change* approach across three different projects, where a constituent part of the work was to consider the development of skills and competencies for beneficiaries. Importantly, the article highlights that the development of digital and media literacies can commonly be seen through the lens of 'solutionism', where skills frameworks over-simplify the task of developing competencies and underestimate the role of education (2022: 2). For the work conducted here, and the change in focus towards access for the most digitally excluded, the article highlights access as an important first step in an individual's journey through media ecosystems, where time is needed for digital awareness to emerge through changing media behaviours. These engagements are not necessarily always positive, with platforms that encourage polarising discourse, negative media representations and misinformation (ibid: 3). Here it is important that meaningful interventions are encouraged, that do not pay lip service to the contextual realities that individuals face. As with the work conducted by McDougall and Rega, an obvious limitation to this evaluation is that it is impossible for longitudinal analysis to be conducted, to consider the more far-reaching effects of the project (ibid: 9).

Within the article discussed above, and a recent presentation that relates to this work (McDougall 2022) a *Theory of Change* for developing media literacy around 4 core dimensions can be drawn out:

- ⭐ Full, safe and informed **access** to digital technology and media;

- ⭐ Critical **awareness** of media representation and the health of media ecosystems
- ⭐ The **capability** to use media literacy actively, in society
- ⭐ The critical understanding of the **consequences** of actions in the media ecosystem and use of capabilities for positive consequences.

An important aspect to this modelling above is that media literacy goes beyond a simple decontextualised acquisition of skills and emphasises the role of developing critical perspectives for positive activity. With the purposeful use of the words 'use', 'actively', and 'actions'; this emphasises that media literacy is also contingent on the active use of digital technology for positive outcomes, rather than passive engagement. For McDougall (2022) and many media educators, this provides a key underpinning to the development of literacies in this area.

With the evaluative work conducted here, it aligns to this *Theory of Change* - in terms of providing access to technology and the development of skill capabilities, whether this is from a beneficiary's own activity after receiving equipment or via training and support provision. However, given the type of evaluation that has been possible for this project, this can be seen as only partially aligning with this change theory for digital competencies. The quantitative data collected primarily provides more technical skill perspectives on ability to access and capability to use, rather than evaluating an active, informed, and critical use of technology for positive engagement within media and digital ecosystems. Nevertheless, the other elements of this theory provide a useful framing for the inductive reasoning and evaluation for future work, which will be returned to within the evaluation.

With the overarching approach set out above, what now follows here are further details on the methods used for data collection, and approaches to the analysis of this data

Evaluation Methods

Before data collection activities took place, it was expected that the evaluation work conducted directly with beneficiaries would require multiple mechanisms for collating data. Where possible, they would be encouraged to complete online surveys, as this represented the most efficient way of building up a larger evaluation dataset. It was expected that some individuals would have the capacity to do this independently, while others would receive support in completing from organisations they were connected to (such as those providing beneficiaries with training, or those acting as a referee on funding applications). Nevertheless, it was important to recognise from the outset that the most digitally excluded were not likely to have the required skills, support,

or resources to complete online evaluations. As such, post and phone options were provided.

For conducting surveys online, JISC's survey tool was selected for use. This represented a feature rich tool for conducting evaluations that is used extensively within Higher Education and provides a clear adherence to GDPR data protection requirements (JISC 2022).

To conduct an evaluation that enables a *Theory of Change* approach detailed at the start of this section, beneficiaries needed to complete a start and end survey to capture digital competency before benefitting from the project and then subsequently at the end of their involvement. This would then allow for an evaluation of impact on individual beneficiaries in terms of digital competencies and skills change, by comparing responses between the two evaluation points. This introduced a difficulty in terms of the collation of evaluation data to monitor change, given that they may be accessing more than one project offering. When designing the evaluation, the expectation was that training would be what many beneficiaries would start with, which could then either lead to further training offered by project partners and funding offered by the *Staffordshire Foundation*. As such, mechanisms were put in place to only capture one start evaluation when beneficiaries first accessed the project (whether this was funding or training) and would then be asked to complete end evaluations for each element of the project that they benefitted from.

With project delivery re-orientating towards *Get Connected Funding* as the main entry point for beneficiaries, and training re-orienting towards individualised ad hoc support and *Bite Sized Training* (lasting less than a day), it was not possible to identify any individuals who had benefitted from both training and funding. This is partly due to the decision to anonymously collect data when the project pivoted to shorter training interventions that lasted less than a day. To consider change within these shorter interventions, questions on skill and competency development were reframed so that respondents could indicate perceived levels of improvement resulting from the intervention.

As previously discussed, for many shorter interventions the ad-hoc and individualised nature of these meant that it was not possible for project partners to collect data. The introduction of the *Pop-Up Shop* as a project activity introduced a new data capture requirement, to understand experiences within this context and to also identify which individuals have subsequently accessed *Get Connected Funding* opportunities.

Appendix 1 provides further detail on what data was captured in relation to project activities for evaluation. The core commonality across all forms of data capture related to skill

competencies and development for typical digital activities and software, which enables the evaluation to consider development needs and impact of project interventions on skills. The subsections below provide short, extended narratives on each of the evaluation data collection areas for the project, providing further detail on how this data was collected. After this, a section is provided on how the data was analysed for the project.

Pop-Up Shop Evaluation Data

With the re-orientation of project delivery and the establishment of the *Pop-Up Shop* to develop engagement and provide ad-hoc training and support, evaluation considered these areas across 2 phases of data collection.

Phase 1 was led by project partners actively supporting individuals within the *Pop-Up Shop* context. After seeking permissions for collecting data, individuals provided contact information and key demographic details. This information was then supplied to *Keele University* who took responsibility for gathering data within phase 2. Each individual was provided with a follow-on evaluation survey that sought further demographic information, perspectives on the *Pop-Up Shop* experience, digital skill ratings before attending the shop, skills improvement from attending the *Pop-Up Shop*, areas for development, and whether further training had been accessed after attending (via the project or otherwise).

Data collection in this area also considered signposting to *Get Connected Funding* opportunities, and alongside evaluation questions that directly asked individuals about this within phase 2 of the evaluation, name and contact information was also used to find matches between data held here and data collected in relation to funding.

Get Connected Funding Evaluation Data

This element of the project required three phases of data capture, where it was necessary to ensure that individuals were not asked to repeatedly provide the same information at differing phases.

Data collection within phase 1 related to established project processes for submitting a funding application to the *Staffordshire Foundation*. After submission, a panel of project partners was held each month to consider application approvals. Once complete, applicants were informed of the decision, and any successful applications that had relevant permissions in place for further data collection were then passed over to *Keele University* prior to the next phase of evaluation. Application data could then be collated from the application forms, which included demographic information, data on equipment needs, and supporting information from a referee.

Phase 2 of data collection was taken forwards primarily by the *Staffordshire Foundation* with support from *Keele University*, where a start evaluation survey was supplied to each successful applicant. This survey primarily aimed to baseline an individual's engagement, confidence, and skill competencies with digital technology, before receiving the equipment.

Phase 3 of data collection was then taken forwards by *Keele University*, and this final phase was primarily focused on evaluating what (if any) change had established in digital technology engagement, confidence, and skills for an individual in relation to receiving the equipment. As time with equipment was likely to dictate levels of perceived benefit, the decision was made to leave delivery of this final survey as close as possible to the end of the project, whilst still leaving time to process the data. With monthly approvals of funding running from February 2022 until July 2022, and a close of data collection for evaluation occurring in August, it was not possible to invite and collate data from all those approved for funding. In addition, it is important to recognise that those having less time with their equipment may see differing levels of benefit when compared to those who had received their equipment within the early stages of approval.

Long Training Evaluation Data

For longer training interventions (lasting more than a day), a two-phase approach to evaluation to consider change was established. As these individuals were involved with training interventions where access to IT equipment was necessary, it was possible to run the evaluation in an online format only and completion was supported by the training provider.

Phase 1 of data collection asked individuals to complete an evaluation survey at the start of training, which was broadly similar to the evaluation survey used in phase 2 for *Get Connected Funding*. This encompassed engagement, confidence, and skill competencies with digital technology, before starting training.

Phase 2 of the *Long Training* evaluation then took place at the end of the training programme, and this had broad similarities to the final phase of data collection for *Get Connected Funding*. This was focused on evaluating what (if any) change had established in digital technology engagement, confidence, and skills for an individual in relation to the training they had just completed. Although a comprehensive range of skills (related to digital activities and software applications) existed within the survey for this phase of the training data collection, the evaluation conducted here needed to be sensitive to the training focus. As such, not all the responses have been used in this evaluation report, to focus on what was relevant for the training that took place.

Bite Sized Training Evaluation Data

Training in this area is characterised as lasting less than a day and given the shorter timeframe for delivery, it was not feasible to have multiple steps to data collection. A shorter one-off evaluation survey was created for this project activity, and training providers supported individuals to complete this at the end of the training intervention. Individuals anonymously provided demographic information, alongside data that indicates what improvements have occurred in relation to digital technology confidence and skill. As with the *Long Training* evaluation all individuals completed an online version of the survey, as individuals had access to IT equipment and support from the training provider to complete data collection in this format.

Analysis

The primary framing for analysis of collected data, and consequently the activity within the project, is the assumption that project activity elements will develop digital knowledge, competences, and skills for beneficiaries to take part in digital life. Given the unexpected pivot away from longer training and the introduction of the *Pop-Up Shop* within delivery, this introduced unexpected challenges in terms of generating overall related data perspectives. Where before and after data existed for certain project elements (*Get Connected Funding* and *Long Training*), mechanisms needed to be established to bring these datasets together within the detailed *Theory of Change* approach. This was further complicated by the possibility of receiving data either online, by post or by phone call (specifically for *Get Connected Funding* and the *Pop-Up Shop*), which meant datasets for one element of the project were fractionalised between these collection mechanisms.

To support the collation of data for analysis, data was brought together within a custom designed relational database for the management of data. To ensure the security of data, this was only accessible in an offline format by *Keele University* evaluators. This provided advantages to the curation and analysis of data, which is reflected within the literature review work for JISC's VIDaaS project (Martínez-Uribe & Patrick 2011: 3):

⭐ **Data Curation -** provided a bespoke and centralised way of curating data via input forms
⭐ **Data Integration –** relational structure of the data allowed for connections to be established between different elements of data to generate perspectives within the report.

The second point above is of greater salience for the analysis, and the established relational structure to the data has made it possible for the data to be related, transformed,

and visualised in ways that would not have been possible via the use of spreadsheets alone.

In each of these following sections, exploratory evaluation perspectives are provided that help make sense of beneficiary data. Overall data perspectives (section 3) have been generated to provide descriptive characterisations and thinking regarding the beneficiaries within the project, which is then followed by further descriptive data representations of how beneficiaries perceive levels of digital skill improvement (skill in common digital activities and software applications) for evaluation. The sections that then follow deal with specific elements of the project – the *Pop-Up Shop*, *Get Connected Funding*, and training. For these data analysis sections, beneficiaries accessing these elements of the project are described and summarised for the evaluation, before then considering how beneficiaries perceive own skills development where it is possible to do so.

Inferential statistical relationships have also been calculated and used within the analysis where possible for skills, specifically for *Get Connected Funding* (section 5) and *Long Training* (section 6). This type of data analysis has been used to test a simple hypothesis that these project interventions will change the self-perception of digital skill level for beneficiaries. Given the nature of the data being non-experimental and survey based, this analysis is limited to non-parametric testing where there are only a few assumptions attached to the conducted analysis which are compatible with the collected data (Cohen, Manion, & Morrison 2018: 727).

A simple and easy to conduct non-parametric *Sign Test* was selected as providing the best fit for the data collected here. As discussed by Whitley & Ball (2002), this provides a method of analysing the collected skills ordinal data and is tolerant of outliers that exist within the dataset. As distributions are not normal, this also allows for an analysis to be undertaken without the need for data transformation. For *Get Connected Funding*, skills data collected in phase 2 before beneficiaries received equipment was tested against the same skills data collected in phase 3 at the end of the project. For *Long Training*, phase 1 data on skills before training commenced was tested against the same skills data collected in phase 2 at the end of the training intervention.

It is important to note here that results from the form of testing detailed above is less powerful than parametric equivalents (Cohen, Manion & Morrison 2018: 727), such as the commonly used paired t-test. Additionally, although this form of testing exposes the role of chance in explaining a relationship, it does not provide any form of estimation on the size of any effect that could be indicated within the results (Whitley & Ball 2002). Consequently, although this testing does provide evaluative evidence to support or question the

hypothesis, it should not be taken as a categorical acceptance of rejection without performing further evaluation work in future projects. As such, this statistical testing should not be seen as generalisable beyond the confines of this project and its beneficiaries. When analysing skills within the *Get Connected* and *Long Training* sections, this testing has been supplemented by graphs to consider spread of response and magnitude of change (unpaired), to address shortfalls with this type of testing.

The hypothesis detailed earlier within this section indicates a key decision that was required in terms of the *Sign Test* analysis undertaken. The assumption may have been that a one directional relationship should be a focus for the test, as interventions are only going to positively improve the skills and competencies of individuals, which would lead to conducting one-tailed testing (Cohen, Manion & Morrison 2018: 732). However, it was decided that it would be better to conduct a two-tailed analysis that would look for positive and negative change in skill rankings. As the ranking scales are assessing self-perception of skill for a range of digital activities and software applications, it is entirely possible that this perception may move down as well as up. A lowering in self-perception of skill may relate to an individual broadening their understanding of an area, and a realisation that they do not know as much as they previously thought. As such, negative *Sign Test* results may signal to a project that an opportunity exists for further beneficiary development, based upon this new understanding of their competency. Given the two-tailed nature of the analysis, it was decided that a confidence level of $p \le 0.05$ would be used to decide whether the null hypothesis (no change in skill because of the interventions) could be rejected.

3. Overall Evaluation Data Perspectives

This section of the report provides overall perspectives from data that has been gathered from project delivery. This includes combined data perspectives from the *Pop-Up Shop*, *Get Connected Funding*, *Long Training*, and *Bite Sized Training*, which are initially outlined within the introduction to this evaluation. The main sections that then follow these overall data perspectives consider each of these project activities in further independent detail. As such, these overall data perspectives provide some initial descriptive and analytical perspectives to the data collected, which will then be returned to as the evaluation progresses into other sections that deal with specific project activities.

The first subsection for these overall data perspectives provides descriptive characterisations of the beneficiaries that have been involved with the project across dimensions such as household location, age, disability, and economic circumstances. This is then followed by two subsections that consider skill improvement from project activities for a variety of common digital activities and software applications. Although these sectioned perspectives on skill development are useful for considering project effectiveness, these do not explain what skills beneficiaries desire to develop further within their digital journeys. To address this, the section that follows considers beneficiary responses to desired areas for development. Finally, key understandings are summarised within the final subsection for these overall data perspectives.

Whilst in some areas it has been possible to bring together data from all elements of the project, in others this has not been possible to do. This is due to differences in data collection that were required for each project activity, given the contexts that this took place in. A summary of how data has been collected for each project element can be found within Appendix 1, which also summarises the overall response rates within each data collection area and phase. Additionally, certain data perspectives presented within this section have meant that elements of data have needed to be transformed, to enable differing forms of data to be brought together. Where this has been necessary to do, details of the approach to data transformation are provided.

3.1 Beneficiaries Within the Evaluation Dataset
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To initially provide some descriptive characterisations of beneficiaries within the dataset, this subsection provides several areas from collected data that will be referred to in subsequent main sections of the evaluation for comparison. Some of these data perspectives will then also feature within the conclusions and recommendations, where it is relevant to do so.

To consider project reach in terms of beneficiary locations, available data is initially presented below on this, before the age and gender of participants are explored. Disability and economic status indicators are then considered for collated data, as well as beneficiaries' access to technology. Although these data perspectives do not represent the full extent of individuals who have engaged with the project, it does provide a useful indication of the balance of key beneficiary demographics and use of technology, which may also indicate areas for engagement that would be useful to consider for future project work.

Finally – age, gender, and economic status are then considered in relation to ratings given for confidence with using technology, which provides an opportunity to consider whether there are any key differences in this area between demographic groups.

Location of Beneficiaries
On the following page, figure 3.01 provides a heatmap of beneficiary locations in terms of their place of residence in the Stoke-on-Trent area (n = 289). Data for this visualisation has been drawn from all elements of the project, apart from shorter *Bite Sized Training* as it was decided that this would be configured as a quick anonymous evaluation that would not ask for postcode information. Data of this nature would conflict with its anonymous framing, so any information that
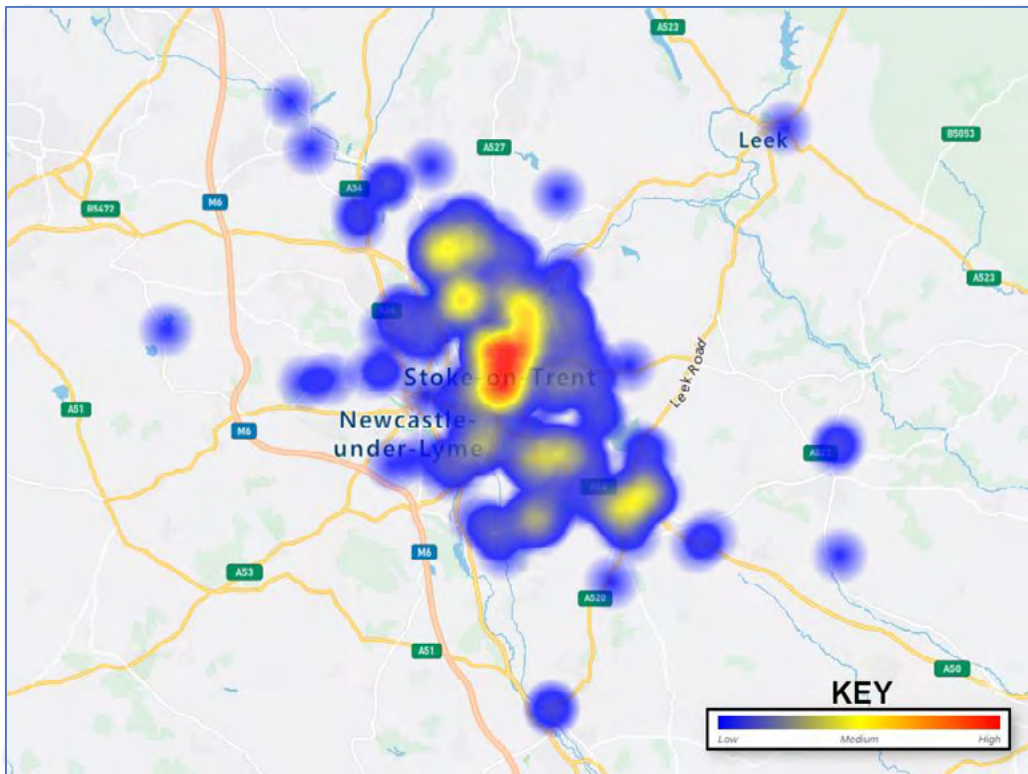
Figure 3.01 – Heatmap of Beneficiary Locations Around Stoke-on-Trent (n = 289)

could lead to individual identification was removed from the survey.

The presented visualisation provides a focused view on postcodes from the dataset, in terms of only showing areas close to Stoke-on-Trent. The most densely populated postcode districts on the visualisation exist within the immediate vicinity of the city (ST1-ST4, and ST6), where 87.1% of the beneficiaries are located. The postcode districts of ST5, ST7, ST10, ST13, ST15 and CW5 then make up most of the other locations for beneficiaries.

For *Discover Digital* ST1-ST12 (excluding ST5) have been deemed as target districts for the project, and it would be useful for future project work to consider the balance of engagement across differing Stoke-on-Trent postcode districts. The best available data to compare beneficiary engagement against is held within the 2011 census dataset, and the table below summarises how beneficiary location compares to this.

Postcode	Census 2011 (%)	Project (%)
ST1	7.9%	28%
ST2	9.1%	9%
ST3	17.9%	18%
ST4	15.1%	18%
ST6	17.1%	22%
ST7	14.0%	3%
ST8	5.4%	0%
ST9	3.1%	0%
ST10	6.8%	1%
ST11	2.6%	1%
ST12	1.0%	0%

Figure 3.02 – Census 2011 Percentage Population Breakdown for Target Postcode Districts, Compared with Project Beneficiary Target Postcode District Percentages

Before discussing the interpretations that can be made from this comparison, it is important to note that due to the historical nature of this census data (Nomis 2011a) these can be considered as tentative. However, the comparison shown above does help to highlight areas that may need to be considered for future project work on digital exclusion, to ensure an appropriate spread of beneficiary location within the project.

For work conducted on the project, ST1 represents an area of concentration for project beneficiaries, where a percentage of 7.9% lived within this district when the census took place, compared with 28% for project beneficiaries. The postcode districts of ST1 to ST4 and ST6 all have broadly comparable percentages, which indicate that beneficiary engagement in these areas is broadly comparable to the number of individuals seen within the census data. All other postcode districts within the table indicate that engagement with beneficiaries is lower than what was recorded within the census, with a particularly large disparity for the ST7 postcode district. Here, census data for this district indicates that 14% of the Stoke-on-Trent population live in this area, and beneficiaries within the project is at 3% for the data we have access to for this district. Despite the age of the census data being used here, this does provide a strong indication that future project work would benefit from targeting individuals within the ST7 postcode in future project work. In relation to this, further analysis of measures of digital exclusion within this postcode district (where available) would help to uncover the extent of the issue.

As the start of this consideration of postcode districts has indicated, some beneficiaries have fallen outside of these areas. Additionally, although this does not appear within the heatmap representation, data has also provided a few individual postcodes within the OL5 (Oldham) and SK9

(Stockport) districts. Most of the postcodes that fall outside of target districts (48%) can be associated to data gathered in relation to the *Pop-Up Shop*. This is an understandable consequence of this type of activity, as a physical presence within the Potteries Shopping Centre cannot restrict support to visitors by residential location. For the *Discover Digital* project, the north of Stoke-on-Trent has been identified as a particular area of concern, with Chell Heath and Fegg Hayes being specifically identified as left behind areas. With these locations falling within postcodes that start with ST6 6, data reveals that 20% of the beneficiaries from ST6 are located within this area.

Age and Gender Breakdown

Figure 3.03 (presented below) provides a graph that breaks down gender percentages of beneficiaries by age (n = 301). Data has been drawn from all elements of the project, and if beneficiaries selected the 'prefer not to say' option, then this is also represented within the graph. n numbers are also provided for each age group within the graph itself.

Firstly, it is important to recognise that this does not provide a complete picture for the project and is based upon what data has been made available to us for conducting the evaluation. The *YMCA* within Stoke-on-Trent have produced a report for under 16 beneficiaries, and further detail on older age groups can be found within the *Beth Johnson Foundation's* report.
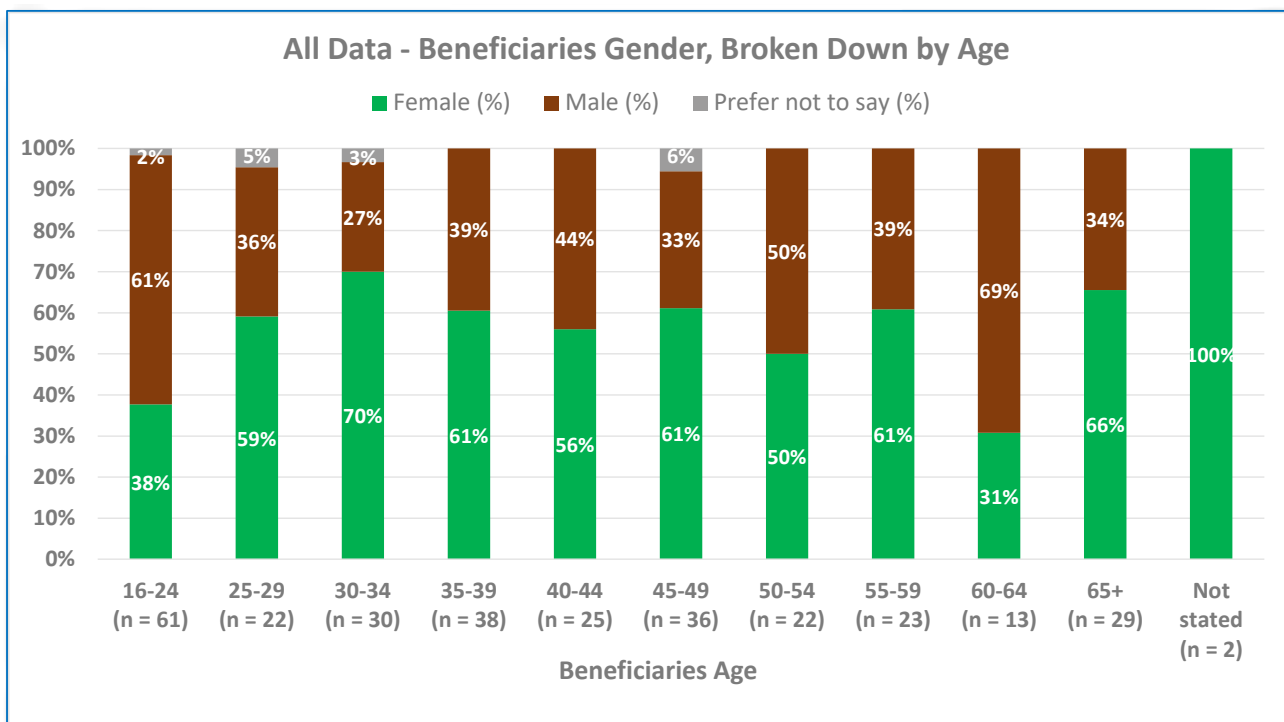
Figure 3.03 – Gender and Age (*Get Connected Funding, Pop-Up Shop, Long Training & Bite Sized Training*)

Bearing this in mind, there are several observations that can be made regarding age, gender, and digital exclusion in relation to the data presented here.

When considering the quantity of respondents in each age group, the largest number of beneficiaries within the project are within the 16-24 category (n = 61), and it is worth considering perceptions of generational divides at this stage. For many within society, a perception exists that new forms of digital technology are firmly in the domain of younger age groups and the use of technology is relatively unproblematic for them. In academic circles, the idea has been popularised by Marc Prensky (2001) in terms of younger generations being digitally native, and older individuals struggling to cope as digital immigrants. Despite this positioning being widely critiqued for its oversimplification and lack of evidence (a good early example of this is provided by Buckingham 2007: 86-93), it persists as a powerful positioning within academic research (see for example Metallo & Agrifoglio 2015; Ahn & Young 2016; and Childers & Boatwright 2021) and wider society (see for example Microsoft 2022).

Bearing in mind the above, there are several possible interpretations that can be associated to the higher quantity of younger participants within the considered dataset. This could be associated to partners ability to engage with this age group across training and funding contexts. If younger individuals believe that digital technology is something that belongs to their generation, then it is also more likely that they will be willing to engage with a project of this nature. Conversely, attitudes and beliefs of older generations may lead them to believe that technology is not for them and avoid engagement with initiatives of this nature.

Other drivers could help explain this higher amount of 16–24-year-olds within the data, which can be related to wider contextual factors discussed within the introduction. For young people who are Not in Education Employment or Training (NEET), difficulties encountered through pandemic restriction and the cost-of-living crisis may be encouraging engagement with the project in terms of furthering their prospects for education and employment. It should not be assumed that digital skills for education and employment are generically in place through a belief in generational divides, and it is possible that these individuals lack the necessary digital equipment and skills to address this situation. National data would seem to indicate that there is a decrease in younger individuals that fall within the NEET category (Gov.uk 2022b), but for many this employment will fall within the category of low paid and insecure working contracts. In addition, there is recent evidence that nearly a third of Stoke-on-Trent disadvantaged young people are not able to access the labour market (Corrigan 2019), and government statistics for the area (Gov.uk 2021b) also indicates that the amount of

16–17-year-olds who are not in education or training has had the highest increase (2.2%) in the West Midlands region since this data was previously collated.

For the factors that go beyond perceptions of a generational binary to explain levels of engagement in age groups (Helsper 2010), quantitative data collected at scale cannot hope to explain why this is the case. Developing understandings in this area for project work may then lead to targeting specific skill interventions for differing age groups, such as digital employment support for younger generations. Clearly other evaluation approaches to understanding needs within age groups is required to supplement work conducted here. Uncovering these types of complexities sits more in the domain of partners on the project, and further qualitative work should be focused on uncovering these types of dynamics via project partners who are in direct contact with beneficiaries.

In terms of the balance of gender within the overall dataset, 56% of respondents have identified as being female, and 44% have identified as being male across all age groups. Given that the new 2021 census data (ONS 2022b) for the Stoke-on-Trent shows a split of 128,600 (49.8%) who are male and 129,800 (50.2%) who are female, this indicates that the project has had some success in terms of engaging with females. This is an important area of exclusion relating to digital technology, where gendered perceptions can help to explain a history of marginalising women in favour of creating a 'boys clubhouse' for technology (Margolis & Fisher 2002). Hicks (2018) provides an interesting and relevant historical perspective on the development of gendered technology inequality within Britain, where ideas of meritocracy are questioned and how even today, females with the right technological skills are not able to break into male dominated technology careers.

When considering the age breakdowns of gender from the dataset, it is evident that two age groups are more balanced towards males, namely 16-24 years and 60-64 years. For both these age groups, it would be useful for project partners to further consider why this is the case and how females within these groups can be encouraged to participate. In this regard, and specifically for younger age groups, recent work by Wong & Kemp (2018) provides some relevant and useful perspectives. Research conducted highlights that although the use of technology has narrowed, females are more likely to enter patterns of passive consumption, rather than using technical skills for active production. Females tend to be a small minority on technical computing courses within higher education, as well as holding technical positions within industry. When considering the *Theory of Change* modelling from McDougall (2022) within the introduction this presents a problem for developing digital literacies and capabilities. These should be underpinned by technical competencies for

production, which ultimately support the critical deconstruction of media platforms, ecosystems, and forms of digital communication. As Wong and Kemp argue (2018: 312-313), for females in younger age groups who feel more connected to creative practices and work, this provides a potential framing that may help to address this problem. Project work of this nature avoids the technical emphasis in the curriculum on computer science, which can be considered as discouraging females to enter technology careers.

Disability

Within all forms of data collection on the project *(Pop Up Shop*, *Get Connected Funding*, *Long Training* and *Bite Sized Training*), respondents were asked whether they believed that they had a disability. The diagram below provides the collated response data for this question.
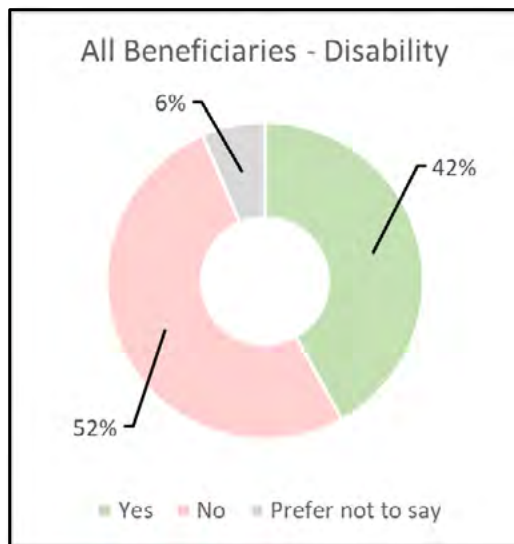
Figure 3.04 – Overall Data on Beneficiaries Indicating Disability (n = 279).

Gauging this data against data that is currently available for the Stoke-on-Trent region is a challenging task, which can be associated to the varying disability estimates that exist and the types of data collected on the project. Three national datasets have been considered, all of which provide differing perspectives on its prevalence in Stoke-on-Trent. The latest annual population survey data for individuals (Nomis 2022) estimates that 46,100 people between 16-64 (29.5%) have a current or work-limiting disability within Stoke-on-Trent. Data that is available on those claiming Personal Independent Payments (PIP) within Stoke-on-Trent in Jul 2022 (LG Inform 2022) was 17,384 (approximately 7% or the overall population). Finally, historical 2011 census data (Nomis 2011b) indicates a total of 56,501 (22.7%) who have a health

problem or disability that limits day-to-day activities in some way.

Given that figure 3.04 indicates that 52% of individuals would classify themselves as having some form of disability, it is possible that the project has been quite successful in engaging with this group, as this goes some way past the highest value of 29.5% from the latest annual population survey. However, it is important to also recognise the limitations in how most data has been collected in this area. In the main, beneficiaries were asked to indicate whether they had disability by either indicating yes, no, or prefer not to say; and this does not provide opportunity to respond on how disability impacts on daily life. It may be that several respondents are indicating disability that has no daily impact, which would not be counted within national statistics. Clearly, future evaluations for this type of project work needs greater granularity to questioning, to make these datasets more comparable.

The importance of evaluating disability within project work such as this cannot be understated, given the multiple barriers and difficulties that individuals may face within digital life. This is brought into sharper focus when considering that 81% of disabled adults are recent users of the internet (Allmann 2022: 18). In terms of the national context that this project has operated in, disabled people were more likely to be living in poverty on inadequate incomes before the cost-of-living crisis. With the current economically challenging conditions that we face, it is estimated that three in ten disabled households are in significant financial difficulty (Collard and Evans 2022). This article also highlights the common structural and discriminatory barriers that those with disability face in terms of employment, which indicates that developing digital skills and competencies in isolation may not be enough to address this type of employment issue. In terms of barriers highlighted within the DCMS media literacy report, those with disabilities are likely to experience exclusion from mainstream education, which limits opportunity to develop the skills and literacies to support digital life (2021: 59). Evidence also exists that points to disability being a factor in the lack of opportunity to develop online digital skills and 'nativeness' should not be assumed (Allmann 2022: 21). The same report also highlights that for all disability age groups, a lack of adherence to digital accessibility within platforms acts as an exclusionary practice for certain types of disability, leading to lower levels of competencies, confidence, and inclusion (ibid: 50). With digital platforms also propagating disinformation online, concerns are emerging in terms of supporting disabled users to navigate this problematic information (Gov.uk 2022c).

The DCMS report also highlights that individuals with disability can experience a heightened level of risk when

compared to other groups, and a high level of concern about these risks can be associated to younger individuals who are starting their digital journeys (Livingstone & Zhang 2019). These elements of risk for younger individuals do need to be appropriately counterbalanced with opportunities for developing learning and social interaction, which can be related to the emergence of digital environments such as Autcraft (King 2018) that provide safe spaces for this to take place in. A range of opportunities also exist for all disabled age groups to have supportive interactions online, but pandemic difficulties can be considered as have a greater exclusionary effect on this group of individuals. Community based project work can be considered as an important mechanism for addressing this, and the recently completed *Digital Lifeline* project provides evidence in this area, highlighting the importance that can be associated to connecting individuals to addresses issues of loneliness and isolation (Good Things Foundation 2022).

The DCMS report highlights that there is a distinct lack of learning provision targeted at disabled users (2021: 61), and this is further compounded by the diversity of need within a broad range of conditions and disabilities. Clearly, levels of evaluation data in this area needs to be improved for future project work, to support the address of complex needs. This has the potential to support activities during project delivery, as well as thinking about future direction at the end of the project. Nevertheless, the data presented is useful for a simple consideration of disability engagement on the project, which can then be compared to specific elements of delivery in the subsequent main sections of this report.

Economic Status

To consider economic status of individuals within the data set, the first graph below provides a perspective on the economic status of project beneficiaries, in terms of whether they are employed, actively seeking employment, unemployed, a student, or retired. It has been possible to collate data from all elements of the project *(Pop Up Shop, Get Connected Funding, Long Training* and *Bite Sized Training)* to generate this diagram
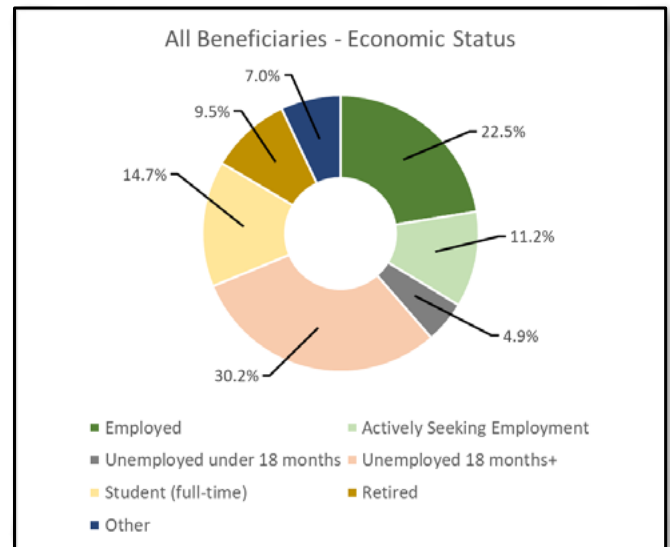
Figure 3.05 – Overall Data on Beneficiaries Indicating Economic Status (n = 285).

As the diagram above shows, the largest proportion of beneficiaries on the project are those who have been unemployed for more than 18 months (30.2%), and when the percentage of those who have been unemployed for less than 18 months is added to this, a total of 35.1% of respondents fall within the unemployed category. This may be higher, as it is possible that respondents who are unemployed may have indicated that they are actively seeking employment (11.2%), but this category could also include individuals in employment who are looking to change their job. It cannot be assumed that the 22.5% of respondents who have indicated that they are employed (either full-time, part time, casualised, voluntary, or fixed term) do not fit within patterns of digital exclusion. These individuals may be employed in ways that do not require these competencies and may also be subject to low pay and difficult working circumstances. For future project work, it would be useful for further data and granularity on employment contexts to be gathered for evaluation.

With students (14.7%) and retired respondents (9.5%) making up the rest of the defined groups, it is important to note here that all these groupings can be subject to issues of exclusion (digital or otherwise) within society, which has been compounded by the cost-of-living crisis, so no assumptions should be made here on who is or is not relevant for the project to engage with. However, given that Stoke-on-Trent has a priority of economic development for the area (Brown 2021), it is useful to consider how levels of unemployment within the project dataset compare to statistics for the local area. The Labour Market Profile (Nomis 2022) for Stoke-on-Trent estimates that 5,900 (approximately 2% of the overall

population) are unemployed, which would indicate that the project has been particularly successful in engaging with individuals that need support in contributing to the economic development of the region.

Finally, the other category within the above diagram, and the open text responses provided, helps to highlight an emergent dynamic within the dataset and individuals that the project has had an opportunity to engage with. The most significant grouping within this category are asylum seekers from the war in Ukraine, and when this is added together with asylum seekers who have permission to work, this represents 12% of respondents within the dataset. Asylum seekers that have benefitted from the project have received equipment via *Get Connected Funding*, and these individuals first emerged within the data via *Pop-Up Shop* activities. Additional detail is provided on how the project has supported these individuals within the *Pop-Up Shop* section of this report.

To further consider levels of economic difficulty across these groupings, evaluation work linked data on respondents in receipt of benefits to their economic status. Out of all respondents 51% were in receipt of social security payments, and the following diagram gives the weighting for those claiming benefits within economic status groupings.
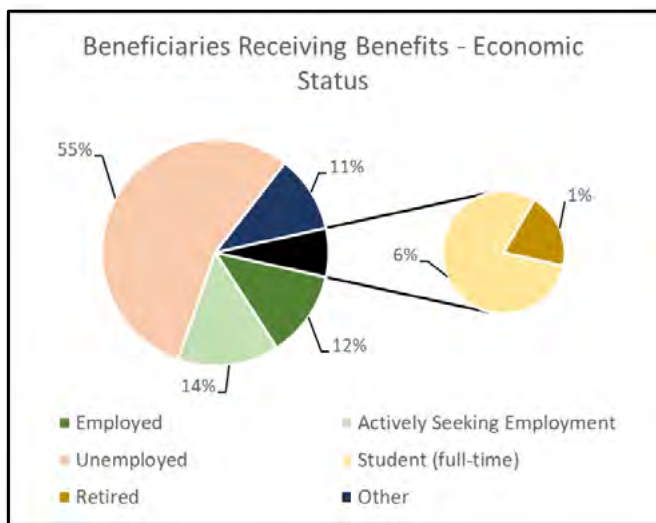
Figure 3.06 – Overall Data on the Economic Status Groupings for Beneficiaries in Receipt of Benefits (n = 145).

Clearly, the headline of 51% of all respondents receiving benefits indicates the project has been very successful in supporting individuals that will undoubtedly be finding great difficulty during the cost-of-living crisis. Not surprisingly, the biggest proportion of individuals receiving benefits are unemployed (55%), which is then followed by those actively seeking employment (14%) and individuals already within

employment (12%). The latter of these provides evidence that employment does not necessarily lead to economic security in difficult times. The majority of the 11% within the other category are asylum seekers, and students represent 6% of respondents on benefits. The smallest category within the dataset are retired individuals who account for 1% only.

Clearly, most of these respondent economic groups could either benefit from digital employability training to support journeys into higher paid forms of work, support with the financial implications of technology access, or a combination of these elements. From the data considered here in relation to economic status, there is a great deal of confidence that the project has had a useful engagement with excluded beneficiaries in this area.

Access to Technology

To be engaged with a variety of digital activities, access to differing devices that provide the most appropriate hardware, connectivity, and toolsets becomes an important consideration for project work such as this. Although issues of digital exclusion cannot be boiled down to access alone, this does provide an important building block to enable the development of digital skills and literacies. A recent OfCOM report (2021: 4) highlights that pandemic difficulties have contributed to creating a greater digital divide, where 6% of all households lack access and this problem of access increases for the over 64's (18%) and lower socio-economic status households (11%).

Data was gathered from respondents on the number of devices that they have access to, which is summarised in the diagram below. It was possible to collect data in this area from all elements of the project *(Pop Up Shop*, *Get Connected Funding*, *Long Training* and *Bite Sized Training*).
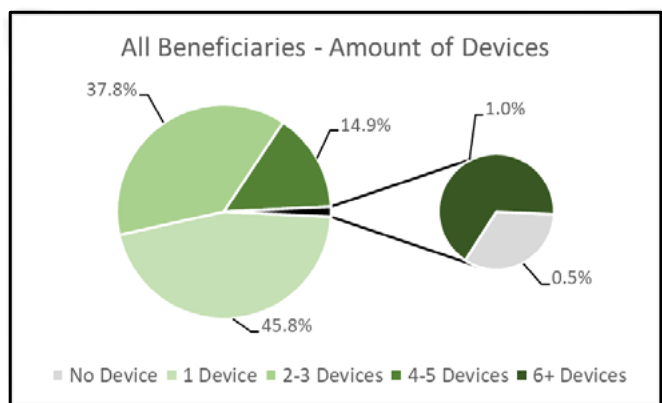

Figure 3.07 – Overall Data on the Amount of Devices Available to Beneficiaries (n = 201)

The diagram above shows that only one individual (0.5%) indicated that they had access to no technology devices, and

the largest category shown on this diagram relates to beneficiaries that had access to one device only (45.8%). These percentages then get gradually smaller as access to devices increases, with 2-3 devices sitting at 37.8%, 4-5 devices at 14.9%, and 6 or more devices at 1%. When considering this data in relation to age, there is some indication that younger individuals are more likely to have multiple devices, with 79% of 16–24-year-olds having access to 2 or more devices, compared to 39% for the 65 and older age group.

Given that only one individual reported having no access to devices, it would be a mistake here to consider that access was not an issue for beneficiaries within the project. To help illustrate this, responses to the types of devices owned are summarised in the diagram below.
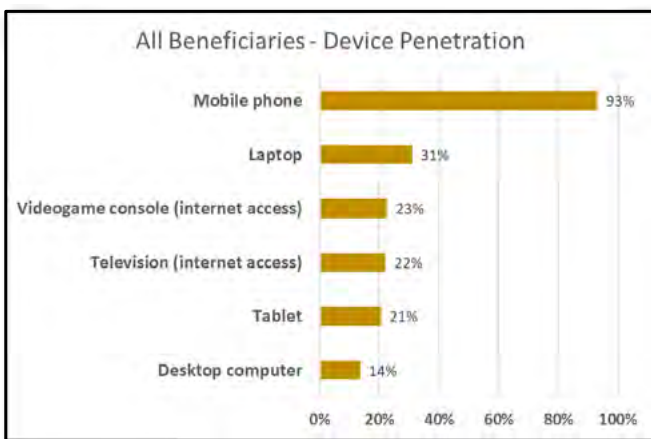
**Figure 3.08 – Overall Data on Devices Available to Beneficiaries (n = 200)**

As the diagram indicates above, the dominant device for individuals is the almost ubiquitous ownership of a mobile phone (93%), and this represents the dominant one device ownership within the dataset. This one device data is further explored within the *Get Connected Funding* section of the report, but it is important to initially signal here what problems this introduces.

In terms of the work of McDougall (2022) discussed within section 2.6 in relation to the *Theory of Change*, this represents problems in developing production-based media literacies to support critically engaged digital lives. Toolsets that are available via mobile phones are restricted at best, and a touch screen interface is not conducive to many production-based tasks. This also has an implication for the economic development priority within the Stoke-on-Trent region (Brown 2021), given that most employment contexts expect competencies that will require software and devices other than mobile phones, acting as a barrier to developing digital employability. This very point is highlighted by OfCOM

reporting (2021a: 4), which also emphasises that devices other than phones are potentially needed for common digital tasks such as completing online forms. Additionally, many children struggle with online schoolwork, as they are only able to complete this on a mobile device. Reports of difficult household negotiations around who can access a limited number of devices have emerged during the pandemic, alongside questions regarding the poor quality of devices (Children's Commissioner 2020).

Clearly, given that the data shows a high level of one device ownership, which centres on mobile phones, this is an important area for *Get Connected Funding* to address for beneficiaries of the project.

When turning to data from respondents on their ways of connecting to the internet, it was possible to collate this from all elements of the project, apart from the shorter *Bite Sized Training* evaluations. Responses received are represented in the diagram below.
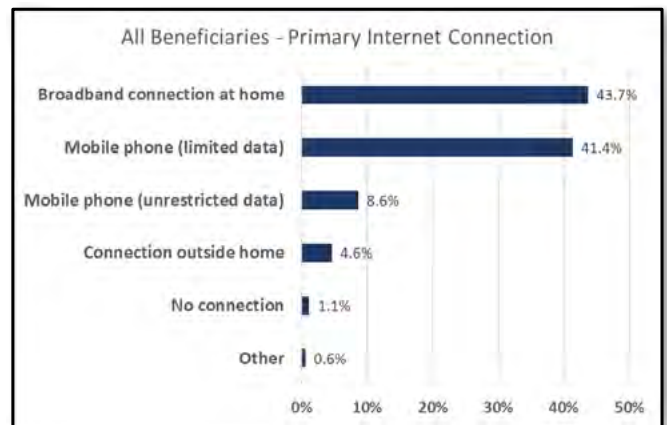
Figure 3.09 – Overall Data on Primary Internet Connection (n = 174)

For a good proportion of respondents (43.7%), they have access to a suitable broadband connection at home, but the next highest type of access represents a barrier for respondents, where access is provided by a mobile phone with limited data (41.4%). Mobile phone access with unrestricted data accounts for 8.6%, whilst 4.6% rely on a connection outside of the home and 1.1% have no connectivity.

When adding these final two values together, these responses seem to be broadly comparable with OfCOM data that suggests that the proportion of UK homes without access has fallen from 11% to 6% during the pandemic (2021b), but the prevalence of limited data mobile connections provides a particular area of concern for digital exclusion. With one in five households nationally reporting that they rely on mobile phone tethering for household internet (OfCOM 2021: 13),

this indicates that for respondents on the project there is a much higher reliance on this type of connectivity. Mobile tethering is a far from ideal solution for households where multiple individuals need to go online at the same time. Additionally, data limits are likely to be hit very quickly with a variety of online uses, such as streaming video and sending / receiving large files. In this scenario, the only option to get online within the home would be to purchase more data, but with the cost-of-living crisis, this isn't necessarily possible to do. The likely outcome is that individuals will be without data until their allowed limits renew.

Levels of Confidence for Disability, Gender & Age Groups

A key area for development within the project relates to building confidence within beneficiaries to be able to participate online. A lack of confidence can act as a barrier, in terms of willingness to participate in a range of online activities. This can be considered as related to positive change in capabilities and media literacies (McDougall 2021), where informed and critical use of technologies will undoubtedly link in to increasing levels of confidence in digital interaction.

To consider this for differing groups of respondents, beneficiaries from *Get Connected Funding*, *Long Training* and the *Pop-Up Shop* were all asked to rate their confidence levels before their participation within the project. The first diagram below summarises these responses in relation to gender.
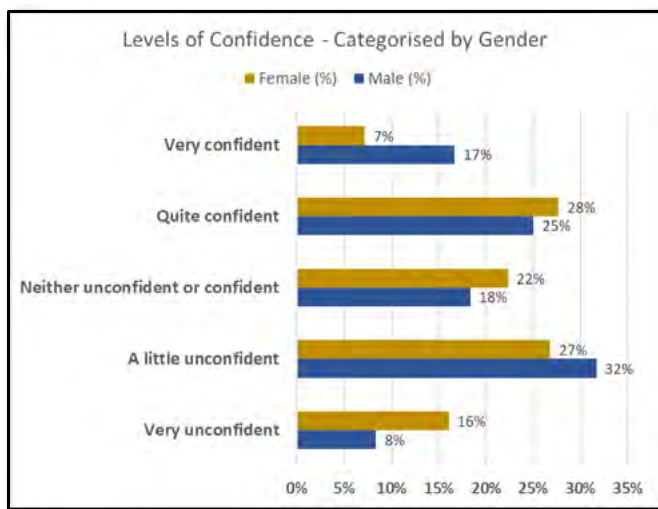
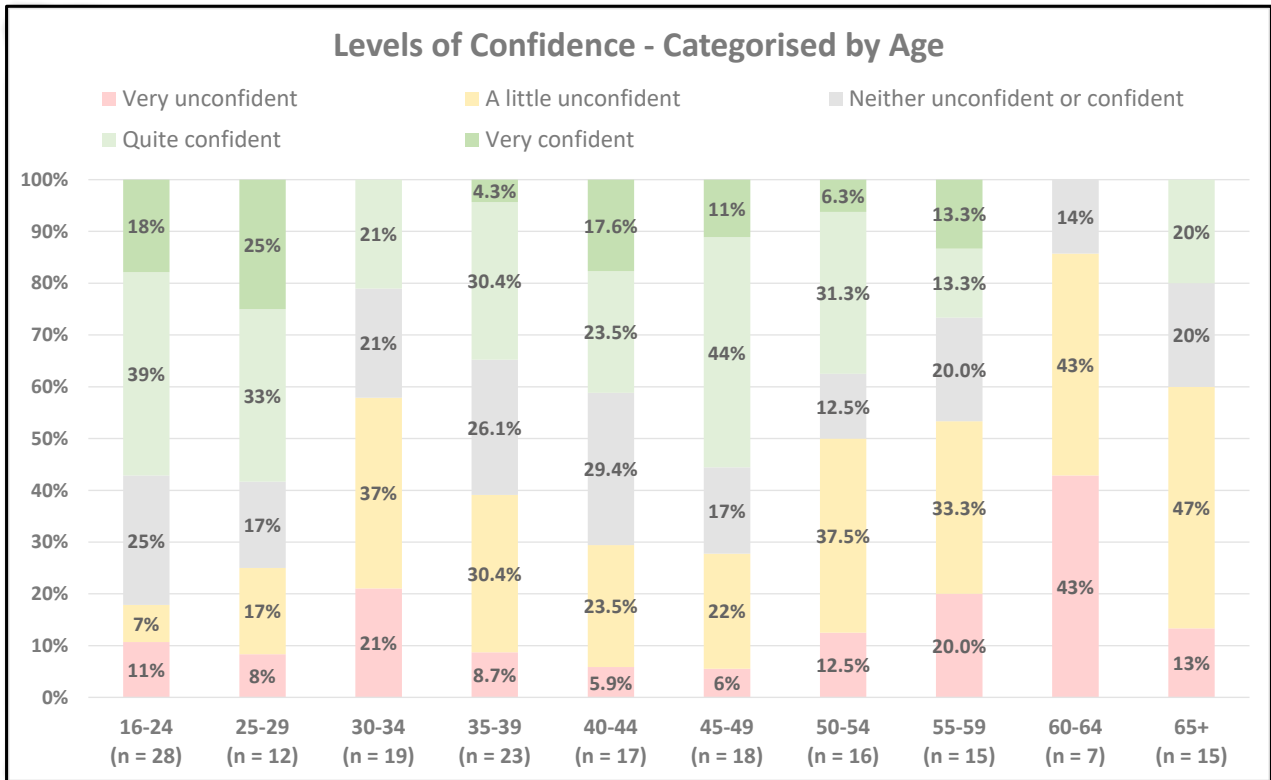**Figure 3.10 – Overall Data on Confidence Levels for Differing Genders (n = 172)**

Bearing in mind previous discussion in this section on gendered perceptions that surround technology use, data presented above would seem to confirm that females are more likely to struggle with confidence in using technology. 7% of females have stated that they feel very confident with technology use, compared with 17% of males; and 16% of females state that they feel very unconfident with technology, compared with 8% of males. Where females tend to perform better relates to ratings that do not lie on the extremes, with more females than males stating that they feel quite confident (28% vs 25%) and less females than males stating that they feel a little unconfident (27% vs 32%).

To consider this data in relation to age, figure 3.11 (presented at the top of the next page) provides a breakdown of levels of confidence within different age groupings, and it is immediately apparent that there is a greater degree of difference presented here. Not surprisingly, the younger age group shows the highest levels of confidence within the data, with a total of 18% indicating that they are either a little or very unconfident, compared with a total of 57% stating that they are either quite or very confident. The least amount of confidence is evident within the 60-64 and 65+ age groups. For the 60-64 age range, no responses were given to indicate positive confidence, and 66% of these individuals stated that they either feel a little or very unconfident with using technology. The 65+ age group performed slightly better (which may be down to the high n response value), with 60% stating that they either feel a little or very unconfident with using technology and 20% stating that they feel quite confident.

A possible explanation of these differences relates to earlier discussions regarding the perception of a general divide in technology use, which is a popularised discourse within society. Although in one sense, this could be deemed as a positive for younger individuals in terms of the willingness to involve themselves with technology use, but over confidence can also represent problems when media literacy development is lacking. This may lead to problematic understandings, negative use, and risky behaviours that are far removed from positive critical use. Older individuals lacking confidence mirrors understandings from the work of others (for example – Age UK 2020)

One unexpected aspect to this representation in that the 30-34 age group show a surprising lack of confidence. Here, 59% of responses are within the little or very unconfident categories, and only 21% of responses fall within the quite confident category. This broadly aligns with the over 65 age group, and the most likely explanation for this is an effective targeting of individuals that are facing other exclusionary factors (digital or otherwise).

Levels of Confidence - Categorised by Age

Figure 3.11 – Overall Data - Levels of Confidence within Age Groupings

The final diagram below in this section looks at levels of confidence for respondents who have indicated that they have a disability within the data, which can be compared back to the previous representations for age and gender. This representation has been generated from data gathered via the *Pop-Up Shop*, *Get Connected Funding*, and *Long Training*.
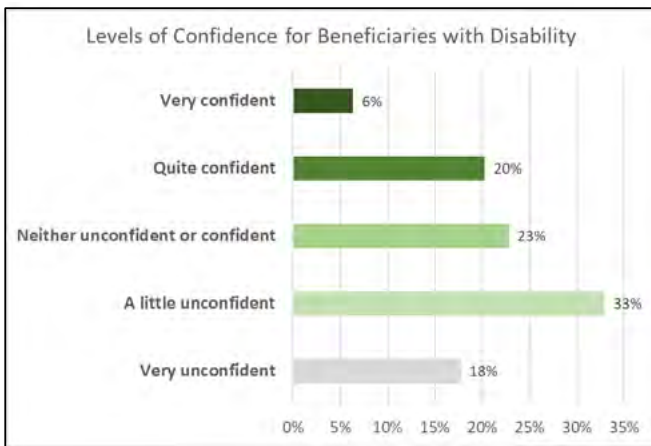

Figure 3.12 – Overall Data on Confidence Levels for Those Indicating Disability (n = 79)

In terms of this grouping, it can be considered as one that is important for confidence building, which can be related to prior discussion to the increased level of barriers and risk that those with disabilities face in online ecosystems. Indeed, it is entirely possible that accounts of these risks and difficulties themselves may also impact on confidence and engagement, even when these have not been personally experienced. A 51% total of responses can be seen within the little or very unconfident categories, and a 26% total can be seen within the quite and very confident categories. This signals a lower level of confidence than the gendered breakdown and aligns levels of confidence to the older 55-59 age group in the previous diagram. Clearly, disability can be considered as an important area for development for project activities such as this.

3.2 Digital Activity Skill Improvement

With the prior section covering characterisations of the beneficiaries within the project, data presented here brings together understandings on skill improvement in relation to digital activities from each of the project elements (*Pop-Up Shop*, *Get Connected Funding*, *Long Training*, and *Bite Sized*
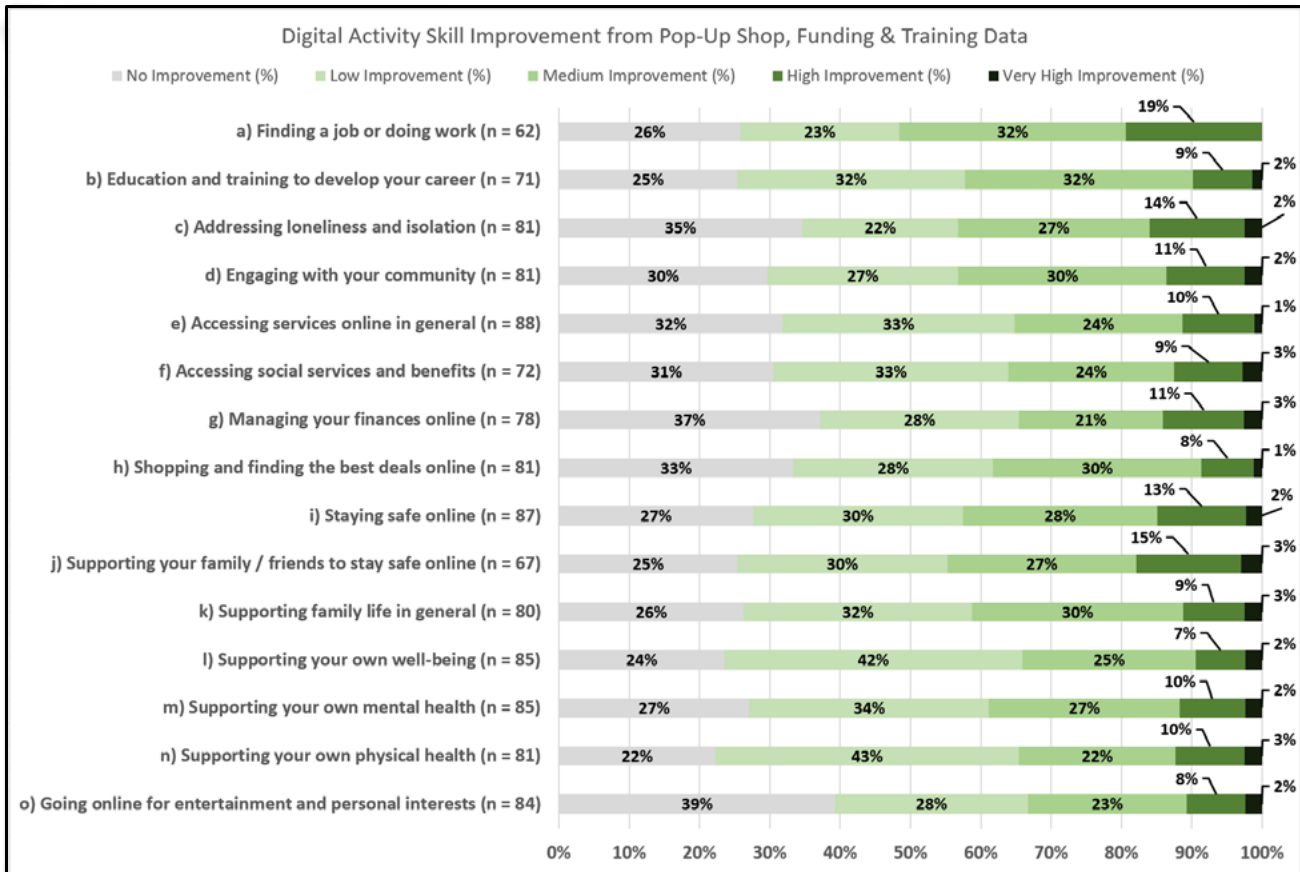
Figure 3.13 – Overall Data – Digital Activity Skill Improvement Ratings

Training). This allows for some initial comparisons to be made in relation to the skills themselves before this data is looked at in relation to desired areas of improvement within the overall data perspectives and later main sections.

In each of the areas where data has been gathered (see appendix 1 for more information), respondents have been asked questions on the same list of digital activities that are presented within the diagram above, but before the data could be brought together, this needed to be transformed for *Get Connected Funding* and *Long Training* to make the datasets comparable. For each digital activity area in these contexts, respondents were asked to rate their skill (from no skill through to very high skill) at the start of their involvement with the project, and when they had chance to benefit from their involvement (either via the equipment that they had been supplied or the training they had benefitted from), they were then asked to rate each digital activity skill in exactly the same way to consider change in these areas.

For the *Pop-Up Shop* and *Bite Sized Training*, this was not possible to do, as it was only feasible to obtain evaluation data via one survey. In these contexts, the questions were

framed by how far respondents felt that their skills level had improved because of their involvement. For each digital activity area, respondents had to rate their skill from no improvement, through to very high improvement.

As such, the *Get Connected* and *Long Training* data went through a process of conversion to make this data directly comparable with the improvement ratings held within the other two areas. To do this, each skill rating was attributed a value (1 for no skill, through to 5 for very high skill), and the start evaluation ratings were then taken away from the end evaluation ratings. These new values were then mapped onto values attributed to improvement ratings (0 for no improvement, through to 4 for very high improvement) so that data could be collated together. If a negative value was returned in this process, these were classified as no improvement within the rating scale.

At the top of this page, figure 3.13 shows improvement ratings data from the *Pop-Up Shop*, *Get Connected Funding*, *Long Training* and *Bite Sized Training* in terms of the digital activities that were responded to. This same data is also summarised within a table in Appendix 2. To aid

interpretation here, it is important to note that levels of improvement provide no information on what starting skill beneficiaries may have had, so lower improvement levels may also relate to high starting skills in digital activity areas.

For digital activity areas which show the greatest percentage of low improvement or higher, supporting physical health performs the best, with 78% of responses indicating some form of improvement. This is closely followed by supporting your own wellbeing at 76%, with education and training to develop career and supporting family / friends to stay safe online at 75%. The lowest digital activity improvement relates to going online for entertainment and personal interests, where 61% of respondents have indicted a low improvement or higher. This is followed by managing your finances online at 63% and addressing loneliness and isolation at 65%. Here, it is important to note that across the board, there are good levels of improvement evident for the digital skills presented here, so this should not be interpreted as success or failure in any of these digital activities. For the areas of supporting physical health and supporting own wellbeing, although these areas enjoy the greatest level of some improvement, these also have the highest levels of low improvement across the digital activity skill range (43% and 42% respectively).

When looking at digital activity skills that have enjoyed greater levels of improvement at the higher ratings (either high or very high improvement), finding a job or doing work has performed the best with a total of 19% (although no of the responses fall within the very high category). The next best performing activity is supporting your family and friends to stay safe online with a total of 18%, which is then followed by addressing loneliness and isolation at 16%.

These improvement ratings will be considered further in relation to section 3.4, which summarises respondent data in terms of digital activity areas that they most want to target. It is hoped that the data presented in this section will prove useful for the work of partners, and any future project work of this nature. The section that now follows considers skill improvement in a range of software applications resulting from involvement on the project, and whilst these are presented separately from digital activities, it is important to note that these applications can be explicitly connected to enabling digital activities highlighted within this section.

3.3 Software Application Skill Improvement

As with skills for digital activities, respondents were asked to rate their skill in a variety of software applications at the start and end of their involvement within the project for *Get Connected Funding* and *Long Training*. For the *Pop-Up Shop*

and *Bite Sized Training*, respondents rated their levels of improvement within these software applications. To enable the drawing together of data for this section, data for *Get Connected Funding* and *Long Training* needed to be transformed using the same process used for digital activity skills data (see previous section for more information).

Figure 3.14 at the top of the next page provides a representation of this compiled data, and this is also summarised within a table in appendix 3. As with the previous section, it is important to note that levels of improvement provide no information on what starting skill beneficiaries may have had, so lower improvement levels may also relate to high starting skills in these areas.

Before discussing these overall data ratings, it is important to note that many of these software applications can be seen to be enabling digital activities within the previous section. For example, videogames have an obvious connection to going online for entertainment and personal interests and office applications can also be connected to finding a job or doing work, as well as education to develop your career. Some of these areas can be seen as fundamental competencies that can relate to enabling any form of digital activity, such as the use of operating system software. Skills in this area underpin any form of activity, in terms of the ability to configure a working environment, installing software applications, and ensuring the operating system is up to date to keep digital activity secure.

As previously mentioned, digital activity areas will be further discussed within later sections where it is relevant to do so. Whilst doing this, areas will also relate in data on software application skill to aid discussion. For this section the diagram shown on the next page is provided to give some initial comparisons on levels of software skill improvement resulting from work on the project.

For software application areas that show the greatest percentage of low improvement or higher, email performs the best, where 77% of respondents have indicted a low level of improvement or higher. In some senses, this result is surprising, given that email is a mature form of electronic communication, where it is more likely that beneficiaries have previously encountered using these systems. This is then followed by software to share files with others at 70%, and internet browsing software at 69%. The less well performing areas for any type of improvement starts with coding and programming software, which shows that only 49% of responses report a low improvement or higher. This is followed by videogames at 51%, and graphic design software at 58%.
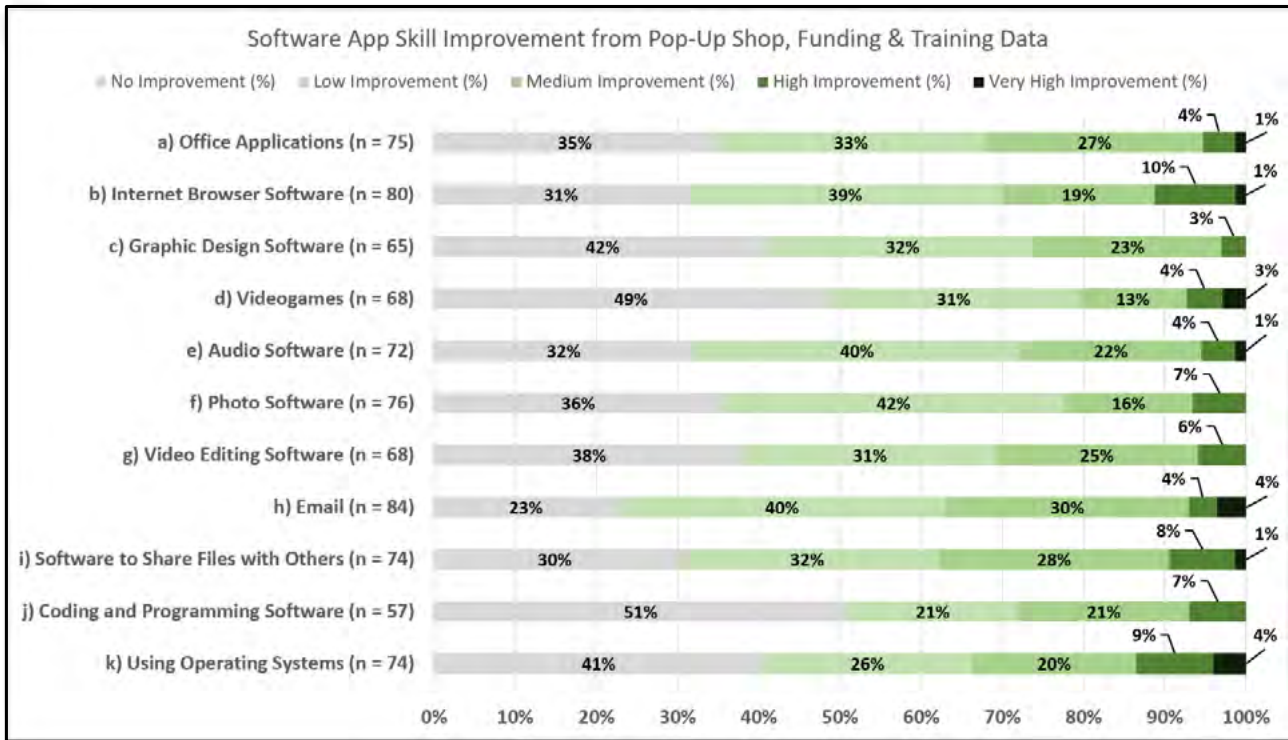
Figure 3.14 – Overall Data – Software Application Skill Improvement Ratings

Although email shows the greatest levels of any improvement, this area has a high, 40% proportion of response within the low improvement category (this may relate to higher levels of skill already being in place for respondents). This is the second joint highest value for low improvement alongside audio software, with photo software showing the greatest level of low improvement at 42%. In terms of the high and very high improvement rankings, using operating systems has provided the best improvement total of 13%. This is then followed by internet browsing software at 11% and then software to share files with others, with a total at 9% for the high and very high improvement rankings.

When comparing these software improvement ratings with the activity areas discussed in the previous section, an important initial observation is that levels of improvement are not reaching the same levels as digital activity areas, which is indicated by the higher values for no improvement in most software areas. This indicates that although there is a better self-perception of skill for digital activities from beneficiaries, the software that enables these does not enjoy the same level of improvement ratings. This will be further discussed in the main sections that follow, specifically for *Get Connected Funding* and *Long Training*.

As with the previous section, there are several software application skills areas that the project should celebrate

development success in, and the data presented here should be useful for reflection on project activities for partners and informing future project work. To help frame reflective work around these software applications, it would be useful for project partners to consider how differing forms of software can enable digital activities. There are many connections between these software tools and activities that can aid the development of active media use to support critical media literacy development (McDougall 2022) and thinking about these relationships will support educational project work.

3.4 Comparing Skill Improvement to Areas for Development

For all data collection areas apart from *Bite Sized Training*, respondents were asked to indicate which digital activity areas they would like their project involvement to address. This also allowed for training leads to be past across to project partners to support training recruitment, when a respondent beneficiary indicated that they were interested in getting involved with training partners.
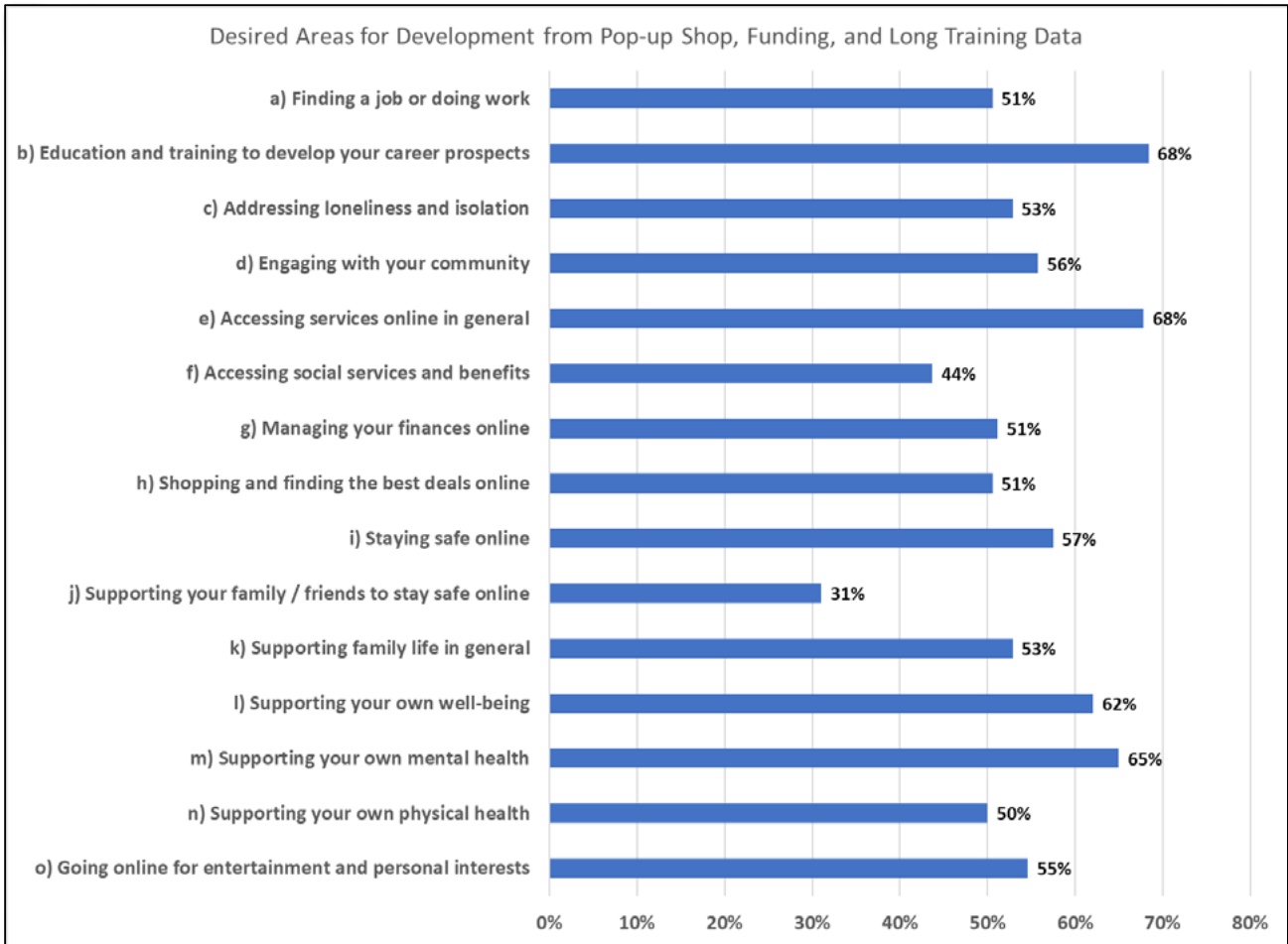
Figure 3.15 – Overall Data - Desired Digital Activity Development Areas (n = 174)

In addition to supporting training, this data is also useful to consider in relation to improvement levels for digital activities in section 3.2, to understand whether higher levels of improvement directly relate to the desired development areas. However, it is important to note here that desires for support within digital activity areas cannot be considered as static, and it is likely that these desires will develop and change as individuals become more involved within digital life. Nevertheless, this does provide some comparative indication as to whether the development in digital activity areas has met these initial desired needs.

When responding to the list of digital activity areas that a respondent would like to develop in, they were invited to indicate as many areas as they wanted for further development. As such, the percentages that are shown within the diagram at the top of this page (figure 3.15) relate to the overall n number for this data (n = 174).

Within this diagram, the joint top area for development relates to education and training to help develop career at 68%, which is also the joint third highest area for any form of digital activity improvement from section 3.2. Accessing services online in general was also indicated by 68% of respondents as a key area for development, and this is ranked much lower in improvement, coming 11th in terms of the percentage of individuals indicating low improvement or higher (68%). However, this can be counterbalanced with the fact that internet browsing software from section 3.3 is the third highest improving skill (low improvement or higher), which is a key software tool for accessing services online in general.

Supporting your own mental health (65%) and supporting your own wellbeing (62%) are the next highest areas for development, which are likely related to the difficult circumstances that are surrounding individuals (such as the cost-of-living crisis and pandemic difficulties). Both these areas have also performed well in terms of digital activity skill improvement, with supporting your own wellbeing showing

the 2nd highest levels of improvement (low improvement upwards) and supporting mental health giving the joint 7th highest level of improvement when going back to section 3.2.

When considering the lower end of responses, an interesting anomaly seems to be present, where only 31% of respondents have indicated that they would like to support family and friends to stay safe online, but this is one of the better improvement rating profiles from section 3.2, with 75% of individuals indicating either low improvement or higher. This may be explained by the fact that respondents to this question will not indicate that this is an important area for development, if they do not have any family members or friends that require this type of support.

Several further interpretations are possible from this diagram, when comparing back to the previous two sections on digital skill improvement. It is hoped that a further consideration of this will be beneficial to project partners to reflect on the work carried out and any future project work. A key reflective consideration for this data relates to a tension between what an individual desires to develop, and what professionals understand will be beneficial for individuals moving forwards. How can this be addressed in training and interventions, when a desire does not exist for these activities?

In relation to this, managing your finances online provides the joint 4th lowest desired area for development, but as the UK seems to be increasingly moving towards a cashless society (Ceeney 2019), this emphasises an importance for everyone to develop understandings in this area. Similarly, shopping to find the best deals online is another of the 4th lowest desired areas for development, when prior discussion has highlighted that significant cost of living savings can be made via this (Serafino 2019). These digital financial concerns also stretch to accessing social services and benefits, which is the second lowest desired area for development at 44%.

3.5 Summary of Overall Data Perspectives

When turning back to the development priorities for the Stoke-on-Trent region (Brown 2021), these overall data perspectives are starting to outline success for several regional priorities. This primarily relates to the skill improvement perspectives, which can be associated to the priorities of economic development, the development of education and skills within the community, and addressing issues of health and productivity. Given the broad remit of the project and complexities associated with digital exclusion, this can be considered as a challenging undertaking for project partners, which was further complicated by the contextual difficulties highlighted in section 2.3.

During this section several more specific elements of useful engagement can be drawn out. From the data available to us, the project has been particularly successful in engaging with younger 16–24-year-olds, which represents the largest age group within the data. This can be considered as a particular group to prioritise for economic development, given that they are just starting out on their journeys into the workplace. As this section has highlighted, nearly a third of disadvantaged young people are not able to access the labour market (Corrigan 2019). It is possible that younger age groups will believe that technology is of their generation providing greater opportunity for engagement, but confidence and competency should not be assumed. It is possible that overconfidence may represent other types of challenges for development in this area.

Overall data perspectives also show that there is a useful skew towards participation from females, which will be further considered in later sections. This group can be seen as a relevant target group, given the male dominated nature of technology and associated employment (Margolis & Fisher 2002; Hicks 2018). As such, economic development opportunities are missed due to the persistent emergence of gendered technology beliefs. It is important that project activities such as this address beliefs that technology employment is of the domain of males, and this involves supporting this group to move from more passive consumption, towards active production within digital contexts. Active production can be seen as fundamental to media literacy development (McDougall and Rega 2022; McDougall 2022), which broadens the purposes of doing this beyond the area of employability. Wong & Kemp (2018) has been used to illustrate how these active production engagements with females within the 16-24 age group can be configured, in terms of providing contextualised connection to the desire for creative production, which should also help to address issues of confidence.

The project has also had success in terms of engaging with economically marginalised groups, such as the unemployed and those in receipt of benefits, which indicates success in targeting excluded groups for digital development. Data also shows that individuals in employment are not necessarily economically secure, and assumptions should not be made in terms of whether these individuals should be engaged with on the project. This very much relates to the contextual difficulties highlighted within section 2.3, and the prevalence of insecure low paid work. Data also indicates that many individuals are likely to only have a phone available to them for accessing the digital world, and this can be seen as problematic for completing common digital tasks (OfCOM 2021a: 4), education (Children's Commissioner 2020), and developing production-based media literacies (McDougall 2022). Connectivity issues also exist for respondents within

the data that have limited data connections, and this alongside equipment access will be returned to within the *Get Connected* Funding section.

Initial indications are that older age groups are more lacking in confidence than other age groups, which mirrors understandings from other work in this area (Age UK 2020). However, this is a limited group within the dataset, so results here should be treated with caution. This difference could again be related to perception of a generational divide that these individuals themselves believe in, and further understandings may be possible via the separate reporting that the *Beth Johnson Foundation* provide.

An important aspect to the discussion within this section is the identification of relationships between the development of skills and competencies within digital activity areas, and how these relate to development within software applications. These are the tools that underpin activity, and are critical to media production, literacies, and active use. For these software applications, ratings lag behind improvement in digital activity areas, and this provides an important area for further reflection and project work. Nevertheless, good evidence is provided for skill improvement in areas that map onto the priorities for the region (Brown 2021), and overall data on desired areas for improvement should be helpful for considering the work conducted here.

Disability as a grouping has been considered as part of this section, but interpretations here can be seen as a little more problematic. This relates to the varying estimates of prevalence from national data (Nomis 2022; LG Inform 2022; Nomis 2011b), which makes it difficult to relate data of for the project to this. Another problem relates to the simplistic data collection in this area, which needs more granularity for evaluation and to support project work. Nevertheless, for what we can see in this area, indications are that engagement with groups that have disability has been good, with the prevalence within the data far exceeding the highest estimate for the region (Nomis 2022). Those with disabilities have also been identified as a group that needs attention in terms of building confidence within digital ecosystems, with data that makes them broadly comparable to older age groupings that lack confidence. Care is needed in this area, to ensure that the complexities that surround engagement for these individuals are suitably addressed (DCMS 2021: 59; Allmann 2022; Gov.uk 2022c).

A perspective has been provided here in terms of the location of beneficiaries and how it matches to target districts within Stoke-on-Trent, and this would seem to indicate that ST7 postcode area needs further beneficiary engagement work. However, it is possible that evidence is available for this area that we have not had sight of. The analysis of postcodes indicates that some beneficiaries exist well outside target

areas, and this can be seen as a natural consequence of the successful reconfiguration of the project with the inclusion of the *Pop-Up Shop* for beneficiary engagement. The intention of this point is not to critique project delivery, rather this highlights how compartmentalised outcome reporting does not necessarily neatly match with the realities of delivery within a complex project such as this. It is also important to recognise that the nature of the evaluation data we are working with here leads us to create siloed groups, which ignores complex intersections and difference for beneficiaries (Souter 2022). For evaluative work, this would need to be addressed by differing forms of data gathering and analysis, which is best conducted by partners involved within the project.

As such, this section on overall data perspectives is providing good evidence that barriers for individuals are being addressed via the project (DCMS 2021: 6). This includes individuals who have limited online experience and access to technology, as well as suitable targeting of vulnerable and marginalised groups. There is also clear evidence of improvement in a variety of skills that can underpin the development of critically evaluating online information and media literacy.

4. Discover Digital *Pop-Up Shop*

After experiencing difficulties in engaging potential beneficiaries and training programme recruitment, the project partnership needed to find a way of addressing this situation to meet expected outcomes. During February and March 2022, the idea of creating a physical presence for the work of *Discover Digital* was first discussed and proposed, and a working group within the partnership was established to meet and develop the idea. This marked the start of planning and organisation of the *Pop-Up Shop* within the Potteries Shopping centre, which ultimately proved to be an effective mechanism for beneficiary engagement.
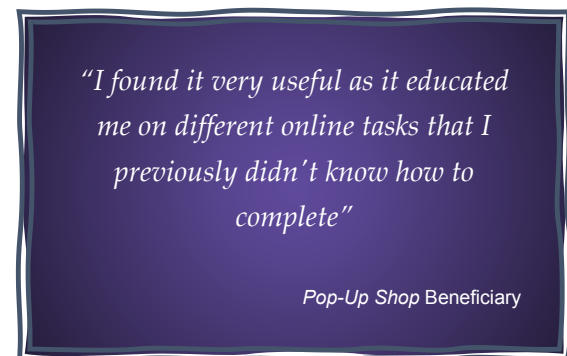
For project partners, this was an involved and time-consuming task, which required several elements to be put in place in a short space of time before launch day on April 23rd. The space that was provided for the shop would not include furniture or decorations, and the intention was to create several zones for individuals that visited the space. This included a learning zone, quiet zone, drop-in zone, and chill-out zone. Alongside creating these and finding furniture, technology equipment needed to be sourced via project partners, and time commitments were needed to work with people within the shop space. Press releases were prepared and circulated (VAST 2022), to help encourage community engagement. Ultimately, resourcing and co-ordination proved to be one of the key challenges associated to this element of project work.

After a brief setup period to get everything in place between the 19th and 22nd of April, the *Pop-Up Shop* successfully

launched on the April 23rd and ran until 29th May 2022. During this time, partners provided ad-hoc drop-in support and sessions to meet the needs of visitors, and organisations who had received innovation grants were also invited to deliver workshops. Established workshop themes included:

- ★ How to get started online
- ★ How to use social media
- ★ How to save money using online tools
- ★ How to make your own podcast

For these workshops and drop-in support, emphasis was put on adapting to meet the needs and interests of shop visitors and building confidence. Online safety was identified as popular topic of support, and it was possible to signpost individuals to further opportunities outside of the shop. Digital Champions for the project provided hands-on support and individuals were helped to complete *Get Connected Funding* applications when appropriate need could be identified. It was felt that that establishing this within the Potteries Shopping Centre provided an accessible location for digitally excluded beneficiaries where they had 'permission' to enter and provided a human face to the project.

> *"I found it very useful as it educated me on different online tasks that I previously didn't know how to complete"*
>
> *Pop-Up Shop* Beneficiary

Although engagement with the shop took a while to establish, it was felt that a good momentum had been built by the time the shop closed and could have continued (if finance and resource had allowed) to bring further benefit to the project. Project meetings reported that 191 significant interactions had occurred during its lifetime and proved to be a great way of reaching elements of the community that would have not been accessed otherwise. A jump in *Get Connected Funding* applications was reported after *Pop-Up* shop activities completed, with an estimated 122 applications being received for panel approval in June. *Keele University* then subsequently received 104 approved applications for evaluation processing, compared to 33 approved applications on the previous month.

In terms of evaluating activity at the *Pop-Up Shop*, details of 94 beneficiaries were initially provided to *Keele University* for follow up. Given the shorter, ad-hoc formulation of training

and support, it was not possible for project partners to gather extensive data in the moment for inclusion within this section. As such, an evaluation survey was created to gather further data, and 20 beneficiaries responded to the request for this to be completed. Further information on this data gathering can be found within Appendix 1.

Although this survey was designed to gather data on skills development at the *Pop-Up Shop*, it needed to be designed to limit data input requirements for those that would subsequently benefit from *Get Connected Funding*. As such, individuals who identified themselves as being in receipt of this funding were not asked to complete the skills rating questions, as these would be completed within that context – before and after they had benefitted from the equipment. Out of the 20 evaluation surveys completed, only 6 of these had not received funding and had responded to the skills-based questions. Due to this limited dataset where it is not sure what training has been completed within the *Pop-Up Shop*, skills-based development will not be covered here.

As such, the first section below provides characterisations of *Pop-Up Shop* beneficiaries from the initial dataset provided to *Keele University* (n = 94), which is then followed by evaluation data gathered by *Keele* that applies to the 20 respondents. This includes details on how individuals found the *Pop-Up Shop*, how useful they found the visit to be, and whether the experience impacted on the confidence levels for using digital technology. Data on learning after visiting the *Pop-Up Shop* is also considered, as well as how many individuals have been supported into *Get Connected Funding*.

4.1 Pop-Up Shop Beneficiaries

With this section covering demographic information that was supplied before the evaluation surveys were sent out to beneficiaries, this provides characterisations of the types of individuals that attended the *Pop-Up Shop*. These perspectives will be compared back to related data presented in the overall data section to illustrate how this activity can potentially target groups. These perspectives should then provide an opportunity to further reflect on this element of the project and consider how similar work can be used in future endeavour.

To consider the age and gender breakdowns of beneficiaries who visited the *Pop-Up Shop*, the following diagram illustrates this, and n numbers are provided next to each age group within the diagram.
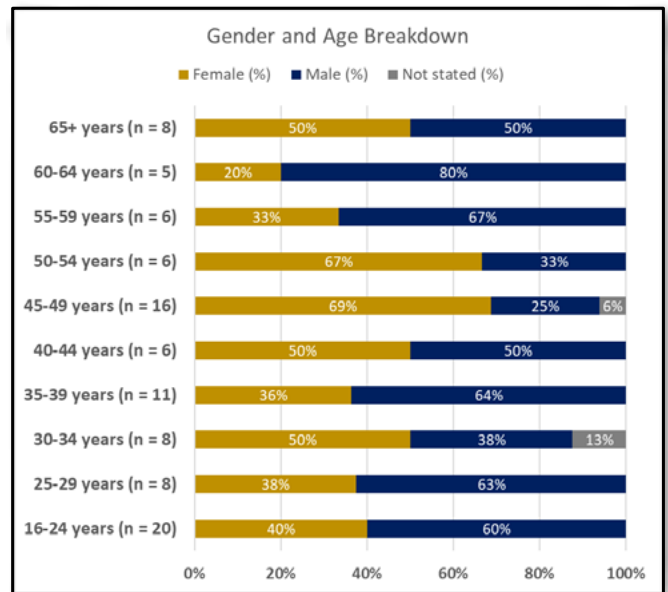
Figure 4.01 – *Pop-Up Shop* – Breakdown of Beneficiary Age and Gender (n = 94)

In relation to the diagram above, the overall percentage of males is slightly higher at 51%, with females making up 49% of this dataset. This is comparable to statistics for the Stoke-on-Trent area, which puts this split at 49.8% for males and 50.2% for females (ONS 2022b). It is not surprising that these two statistics are broadly comparable, given that individuals entering the shop have not been targeted for project involvement in any way. What is interesting for the representation above, is that the *Pop-Up Shop* has been good at attracting involvement for two age groups, one of which is the 45-49 age group which is dominated by females (69% identified for this age range).

Given earlier discussion within overall data perspectives regarding digital technology being perceived in society as the domain of males (Margolis & Fisher 2002; Hicks 2018), this would indicate some opportunity to engage with females within this age group, to move past passive consumption and into positive forms of engaged production (Wong & Kemp 2018). However, this cannot be interpreted as a categorical opportunity, and it would be useful for the project partnership to further consider why this group has a particularly high proportion of females compared to other groups.

The other larger sized group within this dataset is for 16–24-year-olds, and the balance within this group is firmly towards males (60%). This male dominated balance also exists in most other age categories for this dataset. Again, the reasons for this higher proportion of individuals within a younger age group should be reflected upon within the partnership, but one possible explanation may relate to the

generational belief that technology belongs to their age group, and the shop may seem easier to engage with than for other groupings. One respondent to the evaluation survey within the 16-24 age range indicates this everyday easier engagement and interest in new technologies:

"I was walking past and thought it looked interesting whilst I was there, I got to fly a drone and play on VR headset."

Pop-Up Shop beneficiary, 16-24 age group.

This emphasises the importance of having interesting and less common forms of technology available, to attract those who feel as though they are connected to technology. Given that younger individuals may be visiting the town centre in Stoke-on-Trent to spend time away from home, enjoy themselves, and socialise; this element of the project has a good potential to target this demographic.

All other age ranges within the dataset are much lower than these two groupings, and further reflective consideration is needed to understand why this might be the case. Adults with work or household responsibilities may have had less time to visit the *Pop-Up Shop* whilst in the shopping centre, where other commitments have to take priority. For adults that may be retired or have fewer work commitments, could the activities within the shop have put them off? This may relate to feeling less connected to technology than younger age groups, and a belief that technology is not for their generation.

The following diagram summarises data on whether *Pop-Up Shop* attendees considered themselves to have a disability, which can be compared back to the same information within the overall data perspectives.
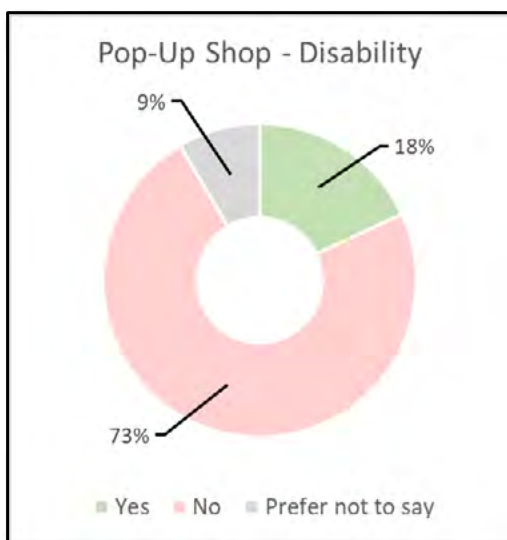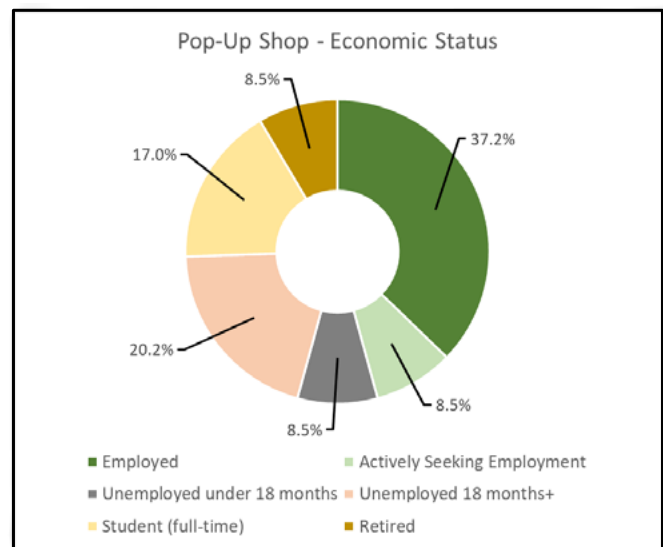

Figure 4.02 – *Pop-Up Shop* Data on Beneficiaries Indicating Disability (n = 94).

With this diagram showing that 73% of individual not considering themselves to have a disability and 18% that do (9% are unknown as they preferred not to indicate this), this would seem to be in line with the estimated range of 7% to 29.5% of prevalence for Stoke-on-Trent discussed within the overall data perspectives (Nomis 2022; LG Inform 2022; Nomis 2011b). When this data is subsequently compared to the same data that exists within subsequent sections of activity within this report, this is the lowest prevalence of disability for all areas of data collection.

Here, it is important to note that because the *Pop-Up Shop* is not targeting digitally excluded groups, then it is expected that this statistic will align with data for the Stoke-on-Trent area, and other areas of work that can target individuals are always likely to provide higher percentages. This is not to say that an untargeted intervention does not have value, and the *Pop-Up Shop* can play an important role in organising targeted interventions after individuals had visited.

To consider the economic status of individuals visiting the *Pop-Up Shop*, the diagram below summarises the proportions of individuals who are either employed or actively seeking employment, unemployed, a student, or retired.

Figure 4.03 – *Pop-Up Shop* Data on Beneficiaries Economic Status (n = 94).

When considering these statistics against the overall data perspectives, several areas can be seen to be quite similar. For example, retired individuals visiting the shop is at 8.5%, and the overall data value is 9.5%. A slightly higher value is evident for students visiting the *Pop-Up Shop* (17% compared to 14.7% from the overall data), and a slightly

lower value for those actively seeking employment (8.5% compared to 11.2% from the overall data set).

In terms of employed individuals, data from the *Pop-Up Shop* is much higher at 37.2%, compared with 22.5% in the overall dataset. This is to be expected, given that many employed individuals will be active within Stoke-on-Trent during their working weeks. This indicates that employed groups could be effectively targeted for an intervention such as this, and as discussed previously, it cannot be assumed that this group of individuals have financial security during the cost-of-living crisis or have digital skills that will support their work. Data on unemployment within this diagram would indicate that the *Pop-Up Shop* has also been effective in engaging with individuals within this situation. It has engaged with slightly more individuals who have been unemployed for under 18 months (8.5% compared with 4.9% from the overall dataset) but has a lower value for those who have been unemployed for more than 18 months (20.2% compared with 30.2% from the overall dataset). This is a lower percentage than what we see overall but is still significantly higher than the estimated 2% for Stoke-on-Trent (Nomis 2022). Clear evidence exists here that the *Pop-Up Shop* can be successful in targeting these groupings.

> *"Spotted the poster on the pop-up shop window and when next passed, a project worker explained what was on offer and refreshed some former IT skills and explored - way overdue!"*
>
> *Pop-Up Shop* Beneficiary

As the introduction to this section indicated, the *Pop-Up Shop* has been effective in engaging community groups that would not have been reached otherwise. Data gathered indicated that asylum seekers first began to become involved with the project when encountering the shop, and it is likely that involvement snowballed from here. The quote below indicates this snowballing effect, from an individual who is sponsoring two Ukrainian refugees interested in developing coding skills:

> *"I am a sponsor to two Ukrainian refugees. The mum took me along one day to see it and meet her friends. I chatted to a worker about coding and was told wavemaker might help. I also saw the statements*

> *written down and was shocked how many people have the same issue as us."*
>
> *Pop-Up Shop* beneficiary

The diagram below summarises this group, in terms of whether these asylum seekers have permission to work or were still seeking it.
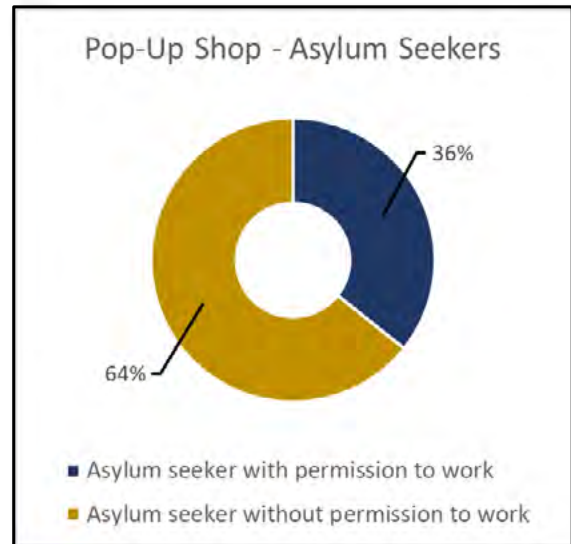
Figure 4.04 – *Pop-Up Shop* Data on Asylum Seekers (n = 14).

The highest proportion of asylum seekers in this dataset did not yet have permission to work with little financial capital after arriving within the country. It is important to consider these individuals as a relevant target group for digital exclusion, given that they are on the very margins of society, until permissions to work can potentially be established. Those with permission to work were most likely to be unemployed or seeking employment and struggling to make ends meet.

This group is interesting to consider in terms of their potential to contribute to Stoke-on-Trent's economic priorities (Brown 2021). Evidence exists within the data showing that these individuals do have good levels of skill with digital technology, but they lack access to equipment to use these skills and look for work (if permissions to do so are in place). Many have fled Ukraine with nothing but a few possessions, which does not include the forms of technology that they used to enjoy in their home countries in more stable times. As such, many of these individuals have gone on to apply for *Get Connected Funding* and this is further explored within this section.

4.2 How Individuals Found the Pop-Up Shop and Activity Whilst There

As part of the evaluation data gathering for the *Pop-Up Shop*, an open-ended question was asked in terms of how they first encountered this. Responses here then naturally progressed into what benefit they got from visiting the shop. The previous quote from the 16–24-year-old is taken from this data, indicating that the technology being used (drone and VR headset) encouraged them to get involved with activities in the shop. The quote in the previous subsection from the sponsor of two Ukrainian refuges, indicated the snowball effect of word of mouth. Further data is evident for this snowball effect, indicating that friends and organisations involved with the project have been instrumental in encouraging attendees at the shop. For those without the means to find out about the project offering online, this has represented an important mechanism for engagement.

For others, broader concerns about financial insecurity in the cost-of-living crisis were given as reasons as to why they sought out support from the *Pop-Up Shop*:

> *Help with money - support with getting PIP back (really struggling with money). Helped to pay bills + food.*

> *Pop-Up Shop* beneficiary

With students being a group attending the shop, responses also indicated levels of digital exclusion for this group, which points to the difficulties that education has in developing digital skills and literacies within tightly formed curricula:

> *"I found out from my tutor. Whilst we were there, a friendly student helped to answer questions about technology and student life"*

> *Pop-Up Shop* beneficiary

Active professionals also picked up on email communications from project partners about the *Pop-Up Shop*, and when attending the project, they also benefitted from developing their understanding of the digital (professionally and personally):

> *"Found that this was actually also suitable for myself, professionally and personally. Learnt how to build a LinkedIn profile and use search engines to gain comparison quotes for e.g. car insurance (moneywise representative in* pop up *shop). Saved money on renewing my car insurance that weekend."*

> *Pop-Up Shop* beneficiary

Clearly the evidence shown from this question within the evaluation helps to highlight the diversity of need that the

project was able to support, with groups and individuals that may have been unaware of the project without this intervention.

4.3 Usefulness of Pop-Up Shop

Within the evaluation surveys circulated by *Keele*, respondents were asked to indicate the usefulness of the visit to the *Pop-Up Shop*. These responses are summarised within the graph below, which indicates that beneficiaries appreciated the support that was given by project partners and others involved with delivery.
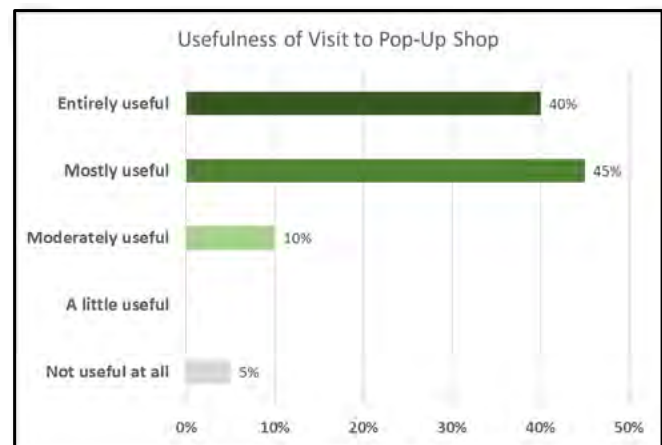
Figure 4.05 – *Pop-Up* Shop Data on Usefulness of Visit (n = 20)

The above paints a very positive picture in this regard, with most respondents responding with a moderately useful or higher rating (95%). The highest percentage for this range of ratings is the mostly useful rating category at 45%. A small 5% of respondents indicated that the visit was not useful at all, which only accounts for one individual within the dataset. Although this data is generated from a smaller dataset of respondents, it is likely that this is indicative of wider opinion.

In addition to being asked about the usefulness of the visit, respondents were also asked whether it was likely that they would have found the support elsewhere, if it had not been provided when visiting the shop. Data for this is summarised within the graph below.
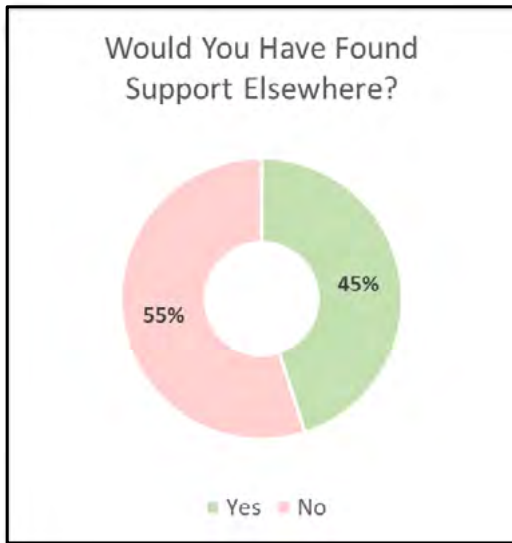
Figure 4.06 – *Pop-Up Shop* Data on Whether Beneficiaries Would Have Found Support Elsewhere (n = 20)

Here, data indicates a greater split in opinion, with 55% indicating that they believed support would not have been found by other means. This indicates that for a good proportion of individuals, the visit was invaluable for furthering their understandings.

45% of individuals indicated that they believed it would have been possible to find this support elsewhere, and in this instance, respondents were invited to explain how they would go about doing this. For some with greater levels of skills and literacy with digital technology, they recognised that it was entirely possible to find support information online, either via using search engines or by completing online courses. Nevertheless, there was some recognition here that finding this information would have taken much longer if they had not visited the shop.

The sponsor of two Ukrainian refugees that was quoted earlier in this section indicated that they had encountered some level of difficulty in finding support. This related to the desire to develop coding and programming skills, which could not be supported by the project partnership, or from this individual's wider engagement with support.

> *"I have tried before. I have asked at the library, but they don't teach coding. I tried buying books aimed at children, but still don't understand. I think having a laptop will give me proper chance at going through a book"*
>
> *Pop-Up Shop* beneficiary

The quote above has not been included to level criticism at the project, but rather this provides a useful framing for the

difficulties encountered when trying to encourage meaningful development of an individual's media literacy and competencies within a 'third space' (McDougall & Rega 2022). These types of problems are indicative of attempts to create genuine and transformational encounters, when meeting the situated need of beneficiaries that is full of 'relays, ambivalences, ambiguities and contradictions' (Bhabha 1994: 406, cited in McDougall & Rega 2022). With this individual lacking support in an area that they desire to develop, and encountering difficultly with the opaque and limited nature of wider support within societal structures, a broader critique of societal support is possible. Given that algorithmic (Williamson 2016) and platform (Carrigan & Sylvia 2022) literacies can be positioned as connected to media literacy, as well as tackling problems associated to misinformation. As such, an understanding of coding and programming at a technical level would be conducive for development of critical perspectives as well as technical employment. However, accessibility of opportunity to develop here is not that easy to find.

A further structural critique can also be attached to how project work of this nature is configured, which can potentially act as a barrier for providing meaningful support. The work of evidencing outcomes generally tends to sit with activities and support conducted by organisations within the partnership, and little recognition will be given to how organisations signpost to other organisations that can provide relevant support. Work that meaningfully engages with beneficiaries at an individual level will undoubtedly encounter these incidences of difficulty on regular occasions, and it is necessary that effective recognition and mechanisms for signposting outside of the project partnership are adequately in place.

> *"Family members are involved with the raising voices and told me about the pop up digital. My grandchildren enjoyed the background photography and VR head set."*
>
> *Pop-Up Shop* Beneficiary

Finally, and to emphasise the important individualised support of partners within the shop to develop skills and broader media literacies, the following quote was received in relation to seeking support elsewhere:

"[attempting to find other support] Research / asking and enquiring about local options but am not of the opinion I would have found so much all at once.

[Pop-Up Shop] In a non-stop environment focused on this IT knowhow and upskilling; which was tailored to individual need and delivered in such a light and enjoyable manner! These opportunities I presume are very scanty. The pop-up shop offer was very suitable for me / my learning needs & style.

It would be very helpful to have this sort of offer around on a more ongoing basis (well advertised) and then word of mouth recommendations would sustain learner uptake I am sure. The need is there."

Pop-Up Shop beneficiary

Here, the beneficiary themselves is simultaneously recognising a need for individualised support that specifically addresses complex and varying needs, alongside a critical awareness of how structures struggle to support society in this manner. Here we would advocate that policy and funding structures find ways of enabling this type of work to take place over extended periods of time, which is a constituent part of moving beyond 'solutionism' (McDougall & Rega 2022).

4.4 Change in Confidence Levels

As part of the evaluation data gathering conducted by *Keele*, respondents were asked to indicate what their levels of confidence were before having the *Pop-Up Shop* experience, and rate what their levels of confidence were afterwards. The following two graphs summarise the data gathered in this area.
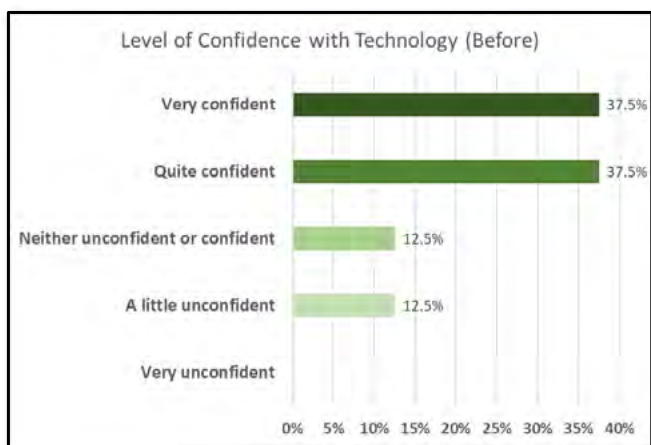
**Figure 4.07 – Confidence Levels Before Encountering the *Pop-Up Shop* (n = 20)**
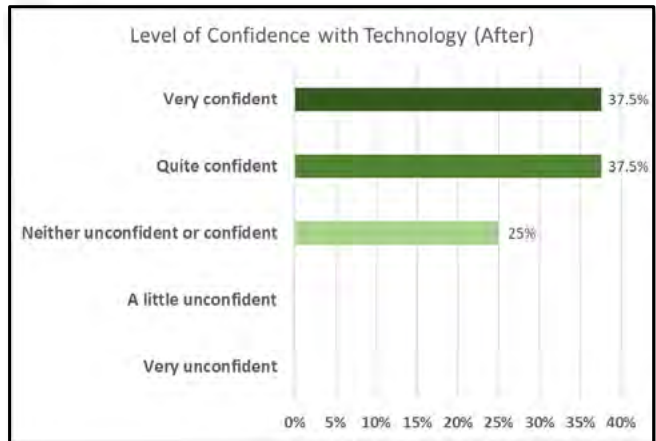
Figure 4.08 – Confidence Levels After the *Pop-Up Shop* Experience (n = 20)

Clearly, the data presented here is only showing a very marginal gain in confidence levels due to experiences within the shop, but this should not be confused with competency development and how useful beneficiaries found the experience. Rather, this can be considered as an inevitable consequence of shorter forms of informal support that may open doors to further development possibilities. Activities within the shop and the development of beneficiary understanding can only start to support these individuals on new digital journeys, and the time available will mean that several questions will remain when they put what they have learnt into operation during their daily lives. As such, this emphasises the need for projects of this nature to provide support over longer timeframes, and we would suggest that a physical presence such as this could play an important drop in role for sustained community interventions.

4.5 Learning After Pop-Up Shop Visit

Keele's evaluation survey also asked whether individuals continued to use learning within there daily lives, and this provides more positive results, when compared to change in confidence levels. The pie chart shown on the next page summarises data received for this question.
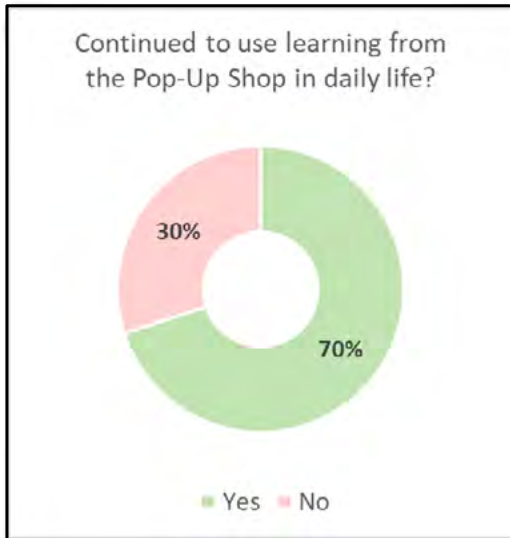
Figure 4.09 – *Pop-Up Shop* Beneficiaries Use of Learning After Visit (n = 20)

Although confidence levels have not been significantly impacted, the above does indicate that the learning that took

> *"I found it very useful as it educated me on different online tasks that I previously didn't know how to complete"*
>
> *Pop-Up Shop* Beneficiary
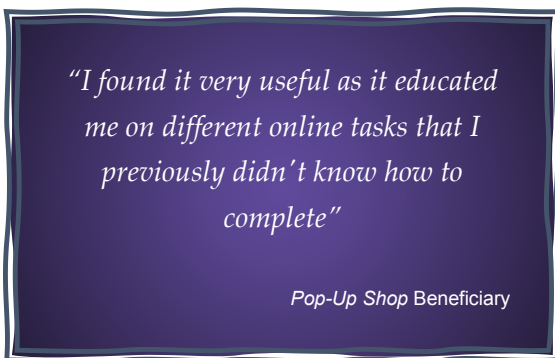
place in this context was useful for most individuals. 70% of individuals have indicated that they have continued to use this learning in their daily lives, compared to 30% who have not. 25% of the respondents within the dataset also indicated that they had used this learning to support job searching after the visit, which aligns to the strategic economic development priorities for Stoke-on-Trent (Brown 2021).

Respondents were also asked as to whether they had found further training after the visit, and the following pie chart summarises responses within this area.
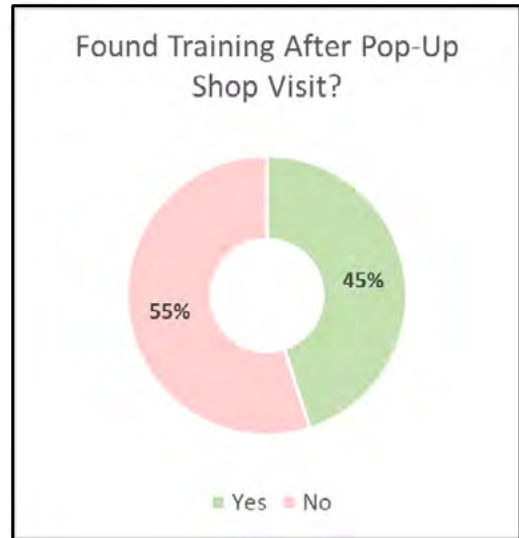
Figure 4.10 – Whether Beneficiaries Found Additional Training After the *Pop-Up Shop* Visit (n = 20)

The data above presents more of a mixed picture, where 45% have indicated that they have found training, and 55% have not. As such, this does indicate that activities of this nature may benefit from improved signposting to opportunities for beneficiaries. However, it is entirely possible that signposting has taken place, but these beneficiaries have not had time to take advantage of these opportunities. For those that have found further training support, responses indicated that some had become involved with the Step Up to HE course at *Staffordshire University* and local library training.

Three individuals indicated that it has not been possible to benefit from further training that they had been made aware of, which indicates the complexities that play out over time when attempting to develop digital competencies and literacies. The quote provided below is very much illustrative of this problem, where individuals who are digitally excluded are likely to be experiencing broader forms of exclusion within society:

> *"Will look into the above / other but am between properties and about to vacate my 2nd interim accommodation for several nights; hence circumstances mainly."*
>
> *Pop-Up Shop* beneficiary

Again, this emphasises the need for time and regular contact with beneficiaries, to understand the wider problems that they face, and provide support at appropriate times within difficult circumstances.

4.6 Get Connected Funding Application Support

A key function of the *Pop-Up Shop*, beyond the contextualised training and support that was provided, related to the identification of individuals who would benefit from *Get Connected Funding* and supporting them through the application process. As such, data gathered here was related to data for funding, to see how many individuals could be identified as appearing within both these datasets. A total of 27 beneficiaries could be identified from the data we have received and able to work with. However, given the increased levels of approved funding applications mentioned at the start of this main section after shop activities were completed (from 33 to 104), this value is undoubtedly higher.

At this stage, and before discussing *Get Connected Funding* in greater detail, it is worth dwelling on feedback provided by individuals who started their journeys within the *Pop-Up Shop* and went on to have their funding approved. The following quote helps to illustrate the difference this has made to one individual in particular:

> *"The funding has been amazing. It has meant I can complete things a lot easier, on the bigger screen… …It [the equipment] also sits right in front of my wheelchair on a table and is angled perfectly. My mobile phone screen I have used up until now is nothing in comparison."*

> *Pop-Up Shop* beneficiary

The quote above helps to illustrate the difficulty mentioned within the overall data perspectives, in terms of many beneficiaries only having a mobile device to access the digital and online services. When originally discussing this in the previous section, problems focused on the restricted software capabilities that a phone offers, but this quote also highlights issue with the nature of the hardware, and the restricted screen size for carrying out common tasks. This issue is further compounded by this individual having a disability.

Previous discussion has also highlighted that it was likely that many individuals would be using old and outdated equipment that may act as a barrier to digital participation, and the following quote from a shop beneficiary who also received funding is illustrative of this:

> *"My greatest need was access to a laptop that could actually run a zoom meeting and have the email open the link was in without it complaining about low system resources!"*

> *Pop-Up Shop* beneficiary

In terms of earlier discussion regarding asylum seekers and Ukrainian refugees, several open-ended comments were received within the *Get Connected* dataset, that nicely illustrate the benefits that it has brought to individuals, in terms of funding replacement equipment that could not be brought over to the UK:

> *"We are family came from Ukraine. Unfortunately we are not able to back to our house now as that area is occupied. Thanks to British people we are able to be in the UK and give our kids (7, 10 and 15 years old) possibility to live the normal life until war stop. Unfortunately we been not able to take any things from the house when escaping so support of your program will give it easy to adopt In your lovely country."*

> Ukrainian Refugee Beneficiary

Alongside data indicating that Ukrainian refugees have appreciated receiving this equipment for establishing themselves within the country and finding a job, this has also been extremely useful for younger members of their family to alleviate anxiety through family contact and participation within education:

> *"[our son] cannot speak English so needs access to translation programmes at home and in school, he has no access here to a laptop as our own chromebook no longer works. He is very keen to start in school and a notebook will help him keep up in school with homework. It will also help him keep in touch with friends in Ukraine. At the moment he has high anxiety and is using his phone all the time to check texts and the news. With a notebook he could see people via zoom."*

> Ukrainian Refugee Beneficiary

Several connections to supporting individuals into work is also evident within the data, and the following two quotes are illustrative of this. The first quote from a highly skilled professional emphasises for several individuals access alone was felt to be enough, whereas for others access and competency support was also required:

> *"Thank you very much for the opportunity to receive support. I am a mother of 3 children, who fled the war at might under the bombings, taking the main - my family. We did not have time to take away financial savings and valuables, because the saved lives. (Fled Ukraine)*

> *I need equipment to help support my children to learn English and being able to learn about my new home by researching online, will help me to integrate more quickly. As I don't have a job yet, I cannot purchase*

equipment myself yet and it will help me to look for work too."

<div align="right">Ukrainian Refugee Beneficiary</div>

"…to find an interesting job, for my own personal development, and to improve my living conditions. Today, I am hindered by the low level of knowledge, skills and abilities to use computer / digital technologies, as well as the lack of computer equipment that will provide access to these technologies and access to training programs."

<div align="right">Ukrainian Refugee Beneficiary</div>

Clearly, the project work within the *Pop-Up Shop* and the subsequent feeding through of individuals to the *Get Connected Funding* is to be celebrated, with the meaningful difference it has instigated into the lives of individuals.

4.7 Pop-Up Shop Summary

For the work conducted here, the project team needs to be highly commended for their ability to flex towards alternative forms of contextualised delivery, which supports project work more widely. This can be seen as an important element within the mix of delivery, which is supportive of the economic priorities for the region (Brown 2021). As one of the training partners has also indicated, this proved to also be a catalyst in the re-formulation of training that fitted with beneficiaries needs, through interaction with these individuals and other training partners.

95% of respondents found this experience to be moderately useful or higher, which refers to a broad mix of informal training and support offered within this shop context. This can be married with 70% of beneficiaries reporting that they have continued to use their learning after the *Pop-Up Shop* visit. Almost half of the respondents also indicated that the provided support would not have been found elsewhere, and even if it had, it would have taken much longer to reach the same level of understanding. An issue has been highlighted around supporting coding and programming, which can be seen as a helpful area for development in terms of employment and wider algorithmic and platform literacies (Williamson 2016; Carrigan & Sylvia 2022). Development within this area can suffer from a lack of available support, and perceptions of this being at a level that is too high for many individuals. The male dominated computer science framings that can surround this area can be seen as problematic and would also need to be broken down in some way. Signposting to wider opportunities within this shop context can be deemed as important to supporting a range of development areas.

Although barriers for certain vulnerable groups cannot be initially targeted via an intervention such as this, which DCMS highlight as an issue (2021: 6), it has the power to reach individuals that would not have been otherwise touched by the project. Consequently, it is entirely possible that certain groups will then become more involved with the project, via a snowball word of mouth effect. Within the data we have access to, we can see that involvement of Ukrainian refugees began to emerge at this stage and the shop acted as a mechanism for increased levels of *Get Connected* applications (this group and more widely). Supporting refugees with access can contribute to economic development within the region, and this also benefits refugees entering education within the UK and issues of communication with family members for wellbeing.

Evidence exists that the *Pop-Up Shop* has been effective in engaging working individuals, and this can be attributed to its physical location within the town centre. In the cost-of-living crisis where employment does not guarantee financial security, coupled with the potential to earn more within employment via the acquisition of digital skills (ONS 2022a), this does represent a relevant group for further engagement. Other evidence suggests that the *Pop-Up Shop* has been successful in terms of engaging with the 45-49 age group, with a high percentage of females. As there are several possibilities as to why this might be the case, we would recommend that project partners further reflect on what the reasons may be for this. This might then help to take advantage of opportunities for development in further project work.

As discussed, the higher number of 16–24-year-olds may be related to the perception that technology falls within their generational competencies, and that the *Pop-Up Shop* offering is well suited to their needs. Conversely, we are seeing lower proportions of older individuals within the data, which may reflect an opposite generational belief with regards to technology, which makes it harder for these individuals to participate. Regardless of the reasons behind this difference, there may be some value in organising and promoting targeted interventions within a shop space to address disparities like this, but this does represent a problem in relation to the structural configuration of projects.

Within the parameters of project work conducted here, it was not feasible for the shop to run longer than a month, and this relates to time and resource intensities that surround work such as this. When working under these conditions, it is not feasible to significantly orientate provision towards groups and effectively promote this. Along with the benefits already discussed, this starts to build an argument for increased levels of funding and time for physical activities such as, which project work can be further built upon.

The *Pop-Up Shop* represents an opportunity to become a point of contact for beneficiaries struggling to establish their digital journeys. Support needs to be accessible as possible to ensure that development is sustained and built upon, and over time it is likely that shop activities will form a conduit for longer training opportunities when beneficiaries have reached the right stage within their journeys. Supply of equipment is also likely to generate questions regarding effective use over extended periods of time, and if properly resourced then this could also become the conduit for support in this area.

As such, activities of this nature could develop into providing a cornerstone for project work, which engages individuals within the contextual realities that they face. As the quote from one beneficiary highlights, the informal contextualised support received is very much needed, and provides a useful environment for addressing issues that surround the development of media literacies that focus on active production and critical engagement - supported by project partners (McDougall and Rega 2022; McDougall 2022). This is something that cannot be addressed by the supply of equipment alone, regardless of what skills are developed from project activity within that area. As such, this is an important element of project working that helps to address barriers to online participation (DCMS 2021).

5. *Get Connected Funding*

As the previous section has begun to indicate, *Get Connected Funding* has been beneficial for Ukrainian refugees seeking asylum within the UK, and this can be extended to a wide variety of digitally excluded groups. This section provides an account of project activity in this area and opportunity to consider how skills have developed for beneficiaries in relation to receiving equipment. This section represents the most comprehensive consideration of digital technology skills, which beneficiaries have had the opportunity to develop in relation to the equipment they have received.

In terms of evaluation data received by *Keele University*, this is the area where the greatest number of responses were received from beneficiaries. From the applications that were sent for evaluation follow up, 154 beneficiaries responded to the initial survey that gave data before benefiting from the equipment. Towards the end of the project, those who had responded to the first survey were asked to complete a second evaluation which was used to consider what impact the supply of equipment had on the skills of individuals. Further information on data gathering for this element of the project can be found within Appendix 1

This section initially starts with two areas, which sets out the delivery of *Get Connected Funding* and the equipment that was supplied to beneficiaries. Characterisations of the beneficiaries then follows, as well as how confidence levels have changed for these beneficiaries and whether beneficiaries believe that they have been given access to the right equipment for furthering their digital lives.

Several perspectives are then provided on the development of skills, where related areas of digital activities are considered together, in relation to software applications that can help enable those activities. With these themes, it is important to note that the groupings of skills could have been framed in several alternative ways, and it is recommended that project partners further reflect upon how these skill areas can be alternatively linked. This may help to develop further understandings on the positive development of beneficiaries and possible approaches to delivering training. As such, this indicates that alongside these skills sections commenting upon change, they also represent possibility for exploratory evaluation that can be considered further for future project work.

In many ways, the supply of equipment could be seen as primarily focused on addressing digital divide in terms of access, and many academics would argue that this does not go far enough to address complex and intersecting needs of the digitally excluded (Souter 2022). However, for those that lack suitable equipment, this must be a key starting point to move forwards and help them understand their own needs in greater depth. If beneficiaries lack suitable access and lack awareness of opportunity, then it is unlikely that longer, more involved training programmes will be successful. This emphasises the need for time to allow excluded individuals to explore the digital world on their own terms, and the establishment of longer-term contact and mechanisms so that further contextualised support can be given at appropriate moments. This relates back to the *Pop-Up Shop*, and the indicated potential for this to become a linking cornerstone to project activities.

5.1 *Get Connected Funding Organisation and Delivery*

The organisation and delivery of *Get Connected Funding* for *Discover Digital* was the primary responsibility of *The Staffordshire Foundation*, with support from the rest of the project partners. As detailed in the introductory section of this evaluation report, the unexpected pivot away from training as the starting point for beneficiaries meant that this element of the project became the initial substantive start to engagement with the project.

Before the start of the project, the expectation was that two strands would be needed for *Get Connected Funding*. For applicants that were already accessing training, it was expected that many would lack digital equipment, software, and internet connectivity to engage with digital life and continue their learning, and individual funding would be needed to address this need. The second expected element of funding was related to accessibility, specifically for the provision of travel costs, childcare costs, and out of pocket expenses. This funding was setup to support the work of peer researchers within the project, and beneficiaries that would

not be able to access training without this support being in place. This second element to funding resulted in only one successful applicant, and consequently does not feature within this evaluation. This situation was expected, given that training did not feature as the primary starting point for beneficiaries. *The Staffordshire Foundation* have also noted that applicants that may have needed this type of funding may have found it difficult to predict or plan out when they would need an accessibility fund. Given the high need for equipment, funding was understandably re-orientated towards this as a primary offering.

From January through to August 2022, a total of 8 funding allocation rounds took place, and *Get Connected* funds were fully used. For each of these funding allocation rounds, a committee of project partners met to consider applications to decide which potential beneficiaries should be awarded with equipment. Early funding rounds had slow beneficiary take up, and it wasn't until the *Pop-up Shop* was established that the *Staffordshire Foundation* saw a significant increase in the quantity of applications coming through for panel approval. It was felt that alongside this new element of the project providing a direct effect in feeding through a higher quantity of applications, it also potentially contributed to a snowball word of mouth effect. This ensured a steady flow of new applications after the *Pop-Up Shop* ceased its operations in the Potteries Shopping Centre. Over the course of the *Get Connected Funding* awards, 294 applications were received, with an award rate of 68%. By the end of the last round in July, a total of £94,912.54 had been awarded, supporting 199 individuals with equipment.

After each committee funding round had reviewed applications and selected beneficiaries for approval, application form data with the appropriate permissions was passed over to *Keele University* for inclusion within the evaluation dataset (see appendix 1 for more information). Beneficiaries were then also provided with an evaluation questionnaire to complete, to baseline their understanding and use of technology before receiving the equipment. Management and delivery of beneficiary equipment represented a difficulty that fell outside of the *Staffordshire Foundation's* normal operating procedures, but this was mitigated by support provided by *Currys* business contract advisors at Festival Park, Stoke-on-Trent. Staff at the organisation advised on suitable technical specifications for the equipment, given the budgetary constraints, and delivered equipment to project beneficiaries. The *Staffordshire Foundation* felt that this was an important element of success for this element of the project, where the company's technical knowledge ensured that the best equipment to suit the needs of beneficiaries was selected at the best possible price.

To maximise the amount of beneficiary time with the equipment the final phase of evaluation data collection was implemented at the end of July / beginning of August. Consequently, data perspectives provided within this phase will reflect the varying amount of time each beneficiary has had with the equipment. The final evaluation phase for data collection could only be sent out to those who had successfully completed the phase 2 baseline evaluation, as its main purposes was to compare beneficiaries' perception of skill with the baseline evaluation.

5.2 Get Connected Equipment

When applying for *Get Connected Funding*, beneficiaries were required to include information on what equipment they felt would be required to meet their digital needs. The application form did not restrict what could be requested via funding within the areas of IT hardware, software, and internet connectivity; but advice was provided on what was likely to be funded in approved applications. This helped to ensure a good distribution of funds was achieved, which did not result in rejecting unrealistic funding applications. The subsections below set out the typical offerings in each of these areas and highlight where occasional differences with the supply of equipment were approved as part of the project.

> *"She really didn't focus much at the centre today - she couldn't believe just has fortunate she has been. There were tears of joy and disbelief. This offer will make a huge difference to her."*
>
> Beneficiary Support Worker

IT Hardware

The typical offering for IT hardware from funding was an entry level laptop with the following indicative specification (exact specification varied over the life of the project):

- ⭐ Intel dual core processor, 11th generation for mobile devices (i3-1115G4).
- ⭐ 4GB DDR4 RAM (3200 MHz)
- ⭐ 128 GB SSD
- ⭐ 14-inch 1080p screen
- ⭐ Integrated Wi-Fi and Bluetooth connectivity

⭐   Integrated camera and microphone

Although positioned as entry level, the hardware capabilities of this device were more than adequate for a range of contemporary activities. The main deviation for some individuals was the supply of an android tablet, which represented a cheaper funded offering. The supplied tablet had the following specifications:

⭐   MediaTek Octa-core processor (MT8768T)
⭐   3GB RAM
⭐   32GB Storage capacity
⭐   8.7-inch 1340x800 screen
⭐   Integrated Wi-Fi and Bluetooth connectivity
⭐   Integrated camera and microphone

It was also agreed that two applicants would be provided with a SIM-free android smart phone due to their circumstances. The supplied phone had the following specifications:

⭐   6GB RAM
⭐   128 GB storage capacity
⭐   6.5-inch 2400x1080 screen
⭐   3G / 4G / 5G connectivity
⭐   Integrated Wi-Fi and Bluetooth connectivity
⭐   Integrated camera and microphone

Some beneficiaries also requested a printer as part of their hardware package, and they were provided with a combined printing, scanning, and copying device that had a 6-month free subscription service included for printer ink.

Software

For beneficiaries receiving a laptop, the following software was provided alongside the default windows applications included on the device:

⭐   Microsoft Office 365 with a 1-year subscription.
⭐   A premium anti-virus and security solution, that was also suitable for use on mobile devices. 1-year subscription included for unlimited devices.

Internet Connectivity

This element of *Get Connected Funding* provided the biggest equipment concern for the *Staffordshire Foundation*. It was not practical under the constraints of the project to organise broadband contracts for beneficiaries and there was a concern that individuals would struggle to continue paying for their broadband contracts beyond the life of the project.

Consequently, beneficiaries that required connectivity were provided with a 4G pay-as-you-go Wi-Fi dongle, with 30GB of data capacity pre-loaded onto it. Given the varying coverage from differing mobile providers, the device provided was dependent on the home location of the beneficiary and which provider offered the best connectivity for their location.

With normal usage this would enable beneficiaries to have internet connectivity that would last for a good amount of time, and beneficiaries would then have the option to purchase a top up card to increase their data allowance without being held to a contract. This also meant that their internet connectivity could be "mobile", with the knowledge that they could also use Wi-Fi when they attended their training sessions or libraries.

5.3 Get Connected Beneficiaries

With the following section covering demographic information from the available dataset for *Get Connected Funding*, characterisations are provided for the type of beneficiaries who received equipment from this element of the project. As before these perspectives will be compared back to the overall data perspectives to draw out differences that may help with reflecting on the work conducted here.

The following diagram provides an age and gender breakdown for funded beneficiaries that have received equipment and / or internet connectivity via the project. At first glance, it is noticeable that there is a much higher proportion of females who have benefitted from this element of the project.
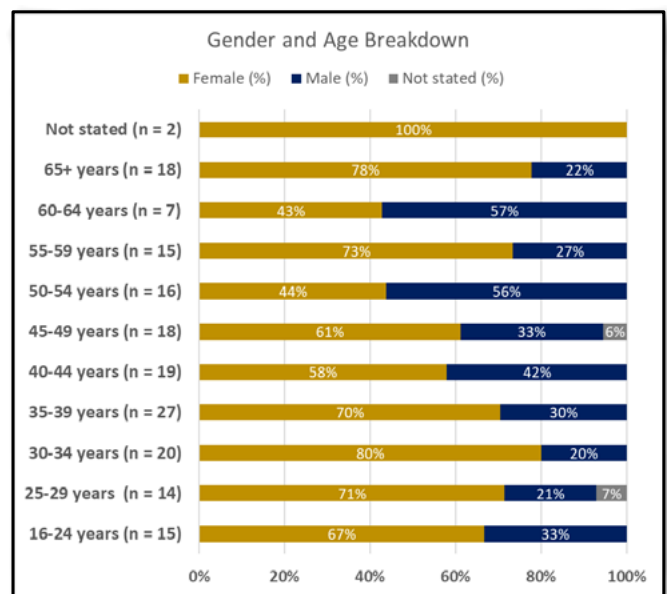
**Figure 5.01 – Age and Gender Breakdown for *Get Connected* Data (n = 169).**

Overall, there are 33% within the dataset who are male and 67% who are female, showing that funding could provide an effective starting point to digital exclusion within gendered groups, and starting to address female exclusion from digital technical competencies, forms of employment, and passive consumption (Margolis & Fisher 2002; Hicks 2018; Wong &

Kemp 2018). When comparing back to the overall data, there is a much-reduced proportion of 16–24-year-olds, and this may reflect the fact that there is a higher incidence of multiple device ownership within this age group. Nevertheless, the number of 16-24 years olds within this dataset are broadly equivalent to other age groups, which indicates that simple generational divides should not be assumed. There is a much lower incidence of individuals within the 60-64 age range, and this would seem to indicate that further work is needed to reach this age group. *Get Connected Funding* seems to have worked better in attracting individuals with the 35-39 age range, which has the highest n value of 27 individuals.

The diagram below illustrates the proportional breakdown of disability within the *Get Connected* data, which provides broad similarity to the overall data perspectives.
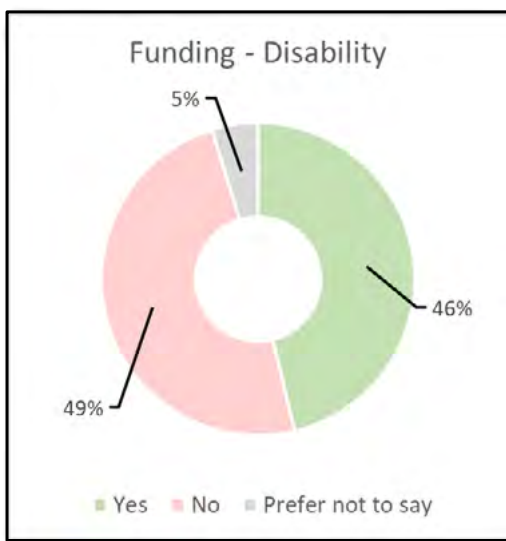
Figure 5.02 – *Get Connected* Data on Beneficiaries Indicating Disability (n = 147).

Data here indicates that there is slightly less incidence of those with disability benefiting from funding, with 49% reporting some form of disability compared to 52% from the overall data set. 46% have not indicated any disability, compared with 42% within the overall dataset. Nevertheless, data here indicates that there is a much higher prevalence of disability when compared to data for the region (Nomis 2022; LG Inform 2022; Nomis 2011b).

As funding of equipment is likely to be more beneficial to those who are experiencing greater levels of financial difficulty within the cost-of-living crisis, the economic status of individuals is a relevant concern within this element of the data. The diagram below summarises this for *Get Connected Funding*.
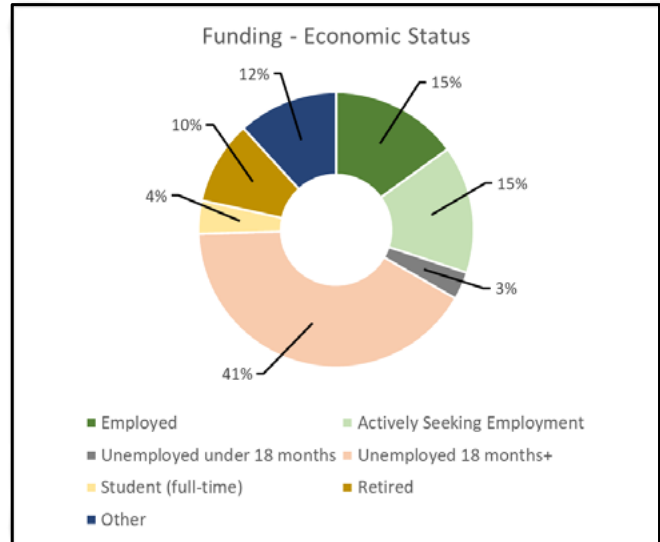
Figure 5.03 – *Get Connected* Data on Beneficiaries Indicating Economic Status (n = 153).

This would indicate that targeting individuals who are in greater economic difficultly has been successful in relation to this element of the project, with 41% of individuals benefitting from the funding being unemployed for 18 months or more, compared to 30.2% within the overall dataset. Funding shows a much lower incidence of student and employed groups, which reflects a more likely incidence of equipment access or financial stability for these individuals. However, as previously highlighted, the cost-of-living crisis means that these groups cannot be ignored for these types of funding opportunities. 27 of these individuals can be identified as asylum seekers, which accounts for 18% of all approved funding applications, making this a significant group that emerged within the dataset where lines of exclusion were more likely to appear around access alone.

Alongside unemployment providing an indicator of individuals that are more likely to benefit from funding opportunities, whether a beneficiary is in receipt of benefits also provides an important indicator for targeted funding. In terms of the individuals within the *Get Connected* dataset, 72% of these are in receipt of social security benefits, which is a much higher prevalence than 51% from the overall data perspectives. As the diagram below indicates when comparing back to the same diagram in section 3.1, how this proportionally breaks down in terms of economic status is broadly comparable.
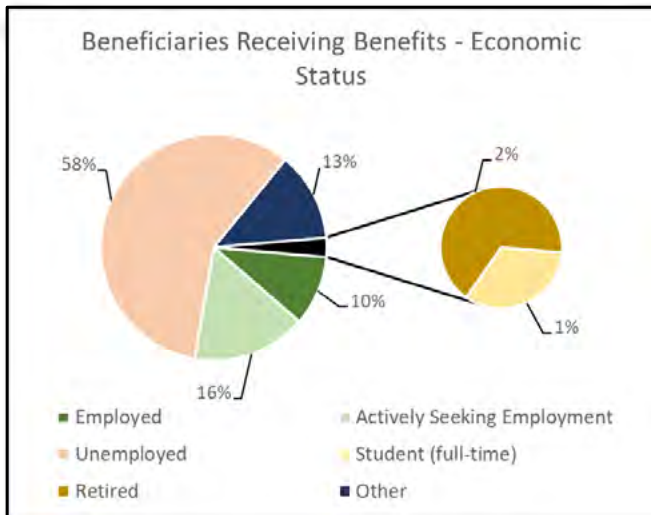
Figure 5.04 – *Get Connected* Data on the Economic Status Groupings for Beneficiaries in receipt of benefits (n = 110).

5.4 Change in Confidence Levels

For *Get Connected Funding*, evaluation data gathering was able to gather confidence level perspectives before receiving equipment, and at the end o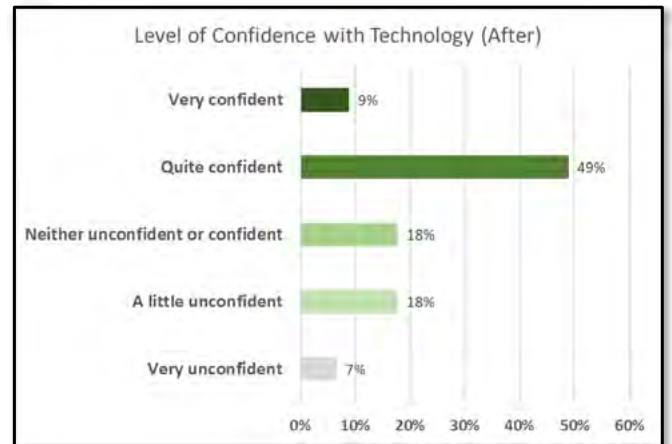f the project after benefitting from the equipment. The following two graphs summarise this data, and what is immediately apparent is that these are demonstrating a noticeable lift in levels of confidence for using technology.
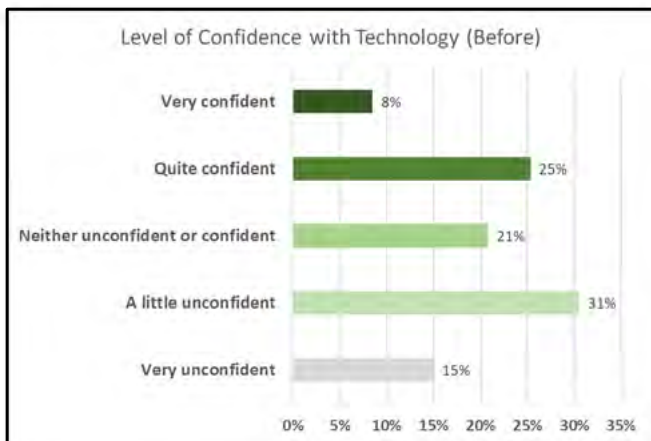
**Figure 5.05 – *Get Connected* Data on Confidence Levels Before Benefitting from Equipment (n = 154).**

Figure 5.06 – *Get Connected* Data on Confidence Levels After Benefitting from Equipment (n = 45).

When discussing the negligible change in levels of confidence for *Pop-Up Shop* experiences (see section 4.4), this illustrates a much greater impact on levels of confidence. Before benefitting from equipment, a total of 46% indicated that they lacked confidence in some way (either very unconfident or a little unconfident ratings), which compares with a 25% total after receiving the equipment. For the quite confident and very confident ratings, a total of 33% is evident before receiving equipment, compared with a 58% total after receiving the equipment. As such this data on improvement in levels of confidence is broadly comparable to data within the following training section.

With the data presented here, addressing a digital divide based upon access can be seen as an important step in building confidence with technology in terms of skills, competencies, and familiarity. This plays out within the daily lives of individuals over a longer period within the home when compared to the *Pop-Up Shop*, which directly feeds into these more significant gains. After receiving equipment, it is much more likely that individuals within the most excluded groups will have the confidence and understandings to get involved with training opportunities, feeding into the view that this can provide an important initial step in supporting the digital lives of beneficiaries. This then requires mechanisms to be put in place that would allow a project partnership to stay in touch with these individuals and provide opportunities (individually contextualised or otherwise) when it fits in with the journeys that they have started. The difficulty here is that everyone will reach points where further support is needed within differing timeframes, and this can prove a difficulty in providing support if the right resources and extended timeframes are not in place.

## 5.5 Access to Equipment – Before and After Funding

For *Get Connected Funding* and access to equipment, this provides an important area for further consideration given that funding is designed to addresses an access digital divide. Data shown here is comparable to the overall data perspectives (see section 3.1), and the diagram below shows overall device penetration for those that have been approved for funding before receiving the equipment.
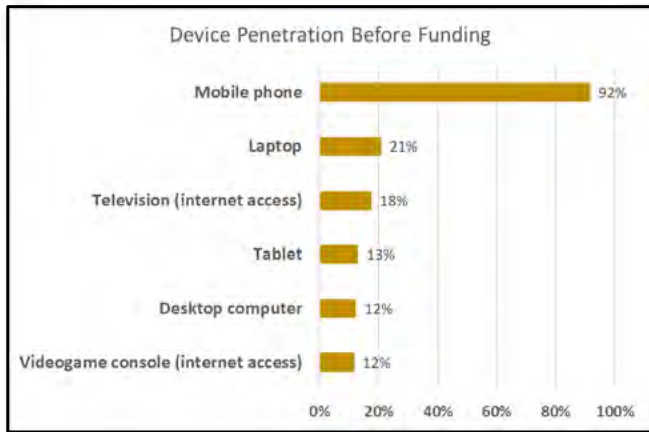
Figure 5.07 – *Get Connected* Data on Devices Available to Beneficiaries (n = 154).

Comparing back to the overall data perspectives, slightly smaller values are evident within each of the hardware areas. Most individuals (92%) have access to the digital world via a mobile phone, and the biggest difference shown in the graph above relates to the prevalence of laptops. Here 21% of beneficiaries own one of these devices, whereas 31% ownership is evident within the overall dataset. This is an obvious consequence of targeting the funding of equipment, where supply of laptop was a primary (but not the only) offering.

As indicated within the overall data perspectives, one device ownership that centres on mobile phone use can act as a significant barrier to production-based media literacies, which can be considered as important for supporting positive and critical use of technology within everyday lives (McDougall 2022) and ensuring that individuals have the right equipment to feed into the economic development of the region (Brown 2021). As such, the data for *Get Connected Funding* was further inspected to understanding the prevalence of one device ownership for those that received equipment. The diagram below summarises the quantity of devices owned by individuals before receiving the equipment.
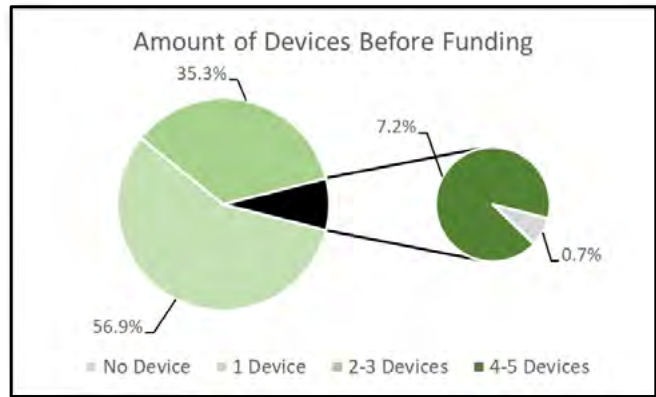
Figure 5.08 – *Get Connected* Data on Number of Devices Available to Beneficiaries (n = 154).

Due to the targeting of funding, it is understandable that 56% of individuals benefiting from this only have 1 device, which indicates that funding has been successful in targeting the right individuals. There is evidence within the data that some individuals included their newly funded equipment when responding to this question, but it is impossible to accurately gauge how many responses have been formulated in this way. Consequently, the actual one device ownership will be a higher value than this. A further 35.3% have stated that they have access to 2-3 devices, and a smaller percentage have access to 4 or more devices (7.2%).

To further explore this data, the diagram below summarises what type of device was owned by individuals who had stated that they only have access to one device.
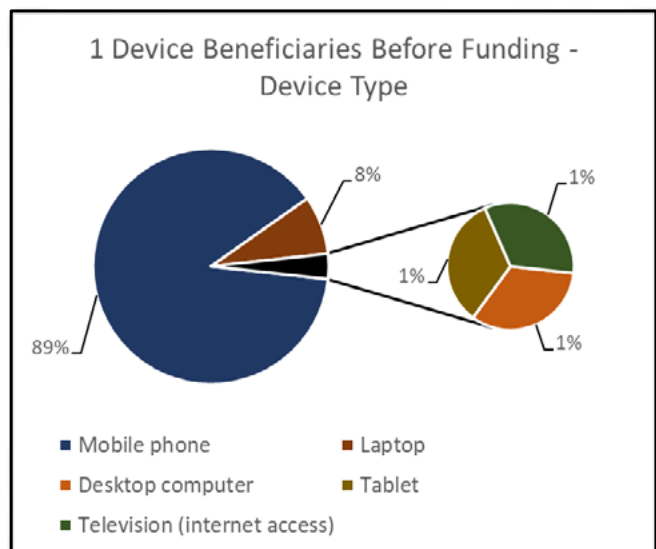
Figure 5.09 – *Get Connected* One Device Beneficiaries, Type of Device Owned (n = 87).

Here the problem with one device ownership becomes explicit, with 89% of individuals indicating that they can only access digital ecosystems on a mobile phone, which is quite restrictive to further media literacies, family education, and economic development within Stoke-on-Trent.

Within data gathering for this element of the project, respondents were asked to indicate whether they felt that they had access to the right equipment before and after benefiting from the supplied equipment. The diagram below summarises responses in this area, and n numbers are indicated within the key for the diagram.
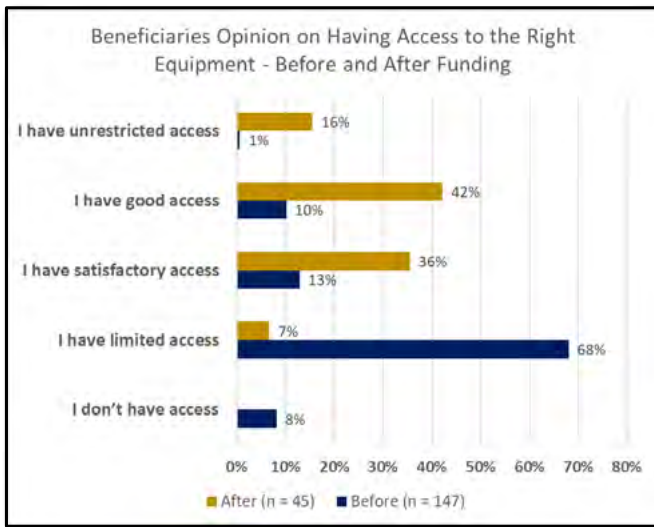

Figure 5.10 – *Get Connected* Opinions on Having Access to the Right Equipment Before and After Funding.

When considering the collated responses for before receiving the equipment (shown in blue) in comparison to after (orange), we can see a good shift in opinion within this area. Before receiving the equipment, a 76% total can be seen for those who believe they don't have access to the right equipment, and 24% who believe they have satisfactory access or higher. This shifts to only 7% stating that they have limited access to equipment after benefitting from the funding, with the rest of the percentage sitting within satisfactory access or higher. This indicates that this element of the project has had a really good level of success in satisfying the needs of individuals in receipt of equipment.

Given that equipment can be further subdivided into hardware such as laptops with bundled software, and internet connectivity that was provided via a dongle, it is relevant here to provide further data in relation to how these specific elements have integrated into the daily lives of individuals. The following two diagrams help to illustrate this, in terms of whether the equipment that they now use for accessing the digital has been provided by the funding, as well as whether

the provided connection is now primarily used for accessing online services.
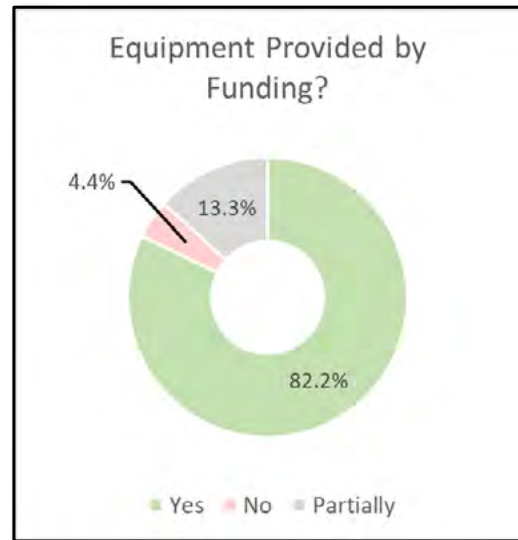
Figure 5.11 – *Get Connected* Data on Whether Equipment Provided by Funding is Used within their Digital Lives (n = 45)
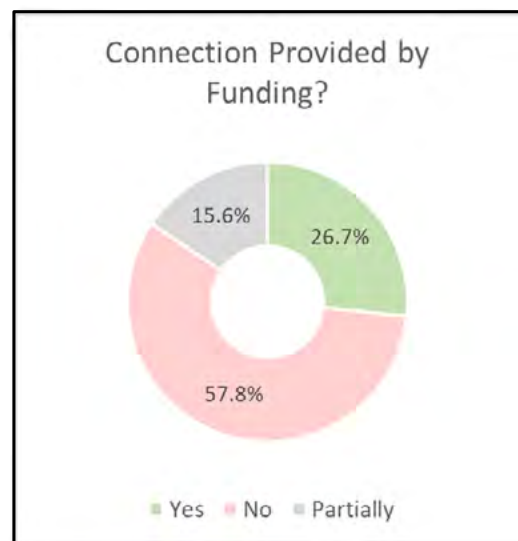
Figure 5.12 – *Get Connected* Data on Whether the Provided Connection is Now Primarily Used for Online Access (n = 45)

The first diagram really helps to illustrate some of the positive views on the equipment received (such as laptops), as most individuals (82.2%) have indicated yes to this equipment being useful within their daily lives. 13.3% have indicated a partial use within their daily lives, which helps to indicate that funding has helped to support them within a mix of technology devices that they have available. A small

percentage have indicated no to this question 4.4%, which indicates a good level of success from the perspective of individuals in addressing need. This is also supported by very positive feedback via the open-ended comments, and the quote below from a beneficiary is illustrative of this:

> *"It's given me the opportunity to have a up to date laptop with Microsoft Office which I have maintained a certain amount of skills from my school years which has helped to remember what I learnt. I'm so grateful for the funding or I would never have this new lease on digital life"*

> *Get Connected* Beneficiary

The latter diagram shown here paints what looks like a slightly different picture in relation to provided internet connections. Section 5.2 has indicated that beneficiaries received a dongle for connectivity that was pre-loaded with a set amount of data for beneficiaries to use, and the reason for this can be associated to it being unfeasible for the project to fund broadband contracts within the private sector, which can be related to the long-term financial commitments that are required. 57.8% of individuals have indicated that they do not use connections provided as their primary was of connecting to the internet, compared with 26.7% who have indicated yes. However, it is important to recognise that a proportion of no responses relates to individuals that did not ask for an internet connection as part of their funding (51% of the 57.8%), as they already had a connection that they were happy with. When this is considered, data shown here is broadly comparable to the views shown for hardware. A proportion (15.6%) have indicated that the provided connection has only partially addressed their connectivity need, and open text responses for these respondents have shown that this is related to limited data availability for dongle use. The following quote is illustrative of this:

> *"…the only problem is that I don't have access to much internet, I can only access the internet 3 or 4 times a month, because I don't have the ability to get one that is unlimited!!"*

> *Get Connected* Beneficiary

The problem of limited data was also highlighted by the *Staffordshire Foundation*, where some beneficiaries had fed back to them that the data had not lasted for a particularly long time when attempting to access streaming TV services and online gaming. Regardless of how long this data lasts, in a cost-of-living crisis where individuals are struggling to understand how they are going to feed themselves or heat their homes, it is unlikely that beneficiaries will be able to add data to their dongles on a regular basis (if at all). As such, this is not a criticism of the project, as this was the only viable solution for project delivery, given how internet connectivity is configured within the commercialised world.

The above problem can also be related to issues with equipment supply, specifically the Microsoft Office software that was bundled with provided laptops. In terms of beneficiaries being able to pay for this software after the subscription runs out is highly questionable, which is not an easy problem to solve. One solution would be to provide free to use open access software such as OpenOffice, and this was suggested within a project community connector event held in June 2022 when this very issue was raised. In one sense this does resolve the issue by providing equivalent applications that are free of cost, but this is not a perfect solution for those wishing to enter employment and contribute to the economic development of the region.

The problem lies with how businesses have now come to operate within the commercialised environment of Microsoft, where their office applications have been designed to work in tandem with business servers. This can encompass the integrated use of SharePoint and collaboration via OneDrive, as well as integration with online meeting software such as Teams and the close integration of software such as Outlook for scheduling and emails. As such, OpenOffice does not provide an equivalent form of access to the world of work when compared to these commercialised offerings, and the financial burden of subscriptions acts as an exclusionary mechanism for digitally skilled employment. It is difficult to see how this could be addressed without a major change to the structures of working practices or software licencing.

The problem with software and commercial licencing can also be extended to what *Currys* were able to bundle with laptops. For example, beneficiaries were provided anti-virus software that was free for the first year and would then require a subscription after this. This is standard practice for commercial retailers, but this is not the most appropriate software for those that are struggling within the cost-of-living crisis. Many free versions of this type of software exist, which would represent a better form of software to use. As things stand, beneficiaries will encounter messages that will warn that their system will be left unprotected after their free subscription runs out, and it can seem that the only choice is to pay for an extended subscription. Clearly, *Currys* can be very supportive in the supply of equipment, but arguments do exist that a project partnership would be better placed to make the software configuration more suitable for those on the margins of society struggling to start their digital journeys (subject to available expertise, time, and resources).

5.6 Change in Skills

To evaluate a possible change in digital skill from receiving *Get Connected* equipment, this section of the report provides perspectives that are drawn from gathered evaluation data (see appendix 1 for further detail). Specifically, this section of the evaluation primarily draws upon phases 2 and 3 of the *Get Connected* evaluation, where beneficiaries provided self-reported digital skill before and after receiving the equipment.

The consideration of skills has been further subdivided into themed areas. The first of these deals with fundamental software application skills, which can be considered as competencies that underpin all possible digital activities for beneficiaries. This includes ability in using operating systems to maintain and configure a device, and the ability to use internet browsing software to support activity in other areas covered within this section.

This is then followed by a section on employment, which covers self-perception of digital skill for finding and doing work, as well as accessing education to help develop career. At this stage, data perspectives of software skill that can be closely linked to employment are discussed, but it is important to note that these software applications have a wider applicability to other themes introduced within this section. By its nature, software can underpin a variety of activities, and it is impossible for all these links to be drawn out here. As such, it is recommended that the partnership reflects further on possible connections and how support could be configured around them. Self-perception of digital skills for financial, family and community are then covered, before a themed section that returns to other software for a variety of digital activities. The related digital activity areas of safety, health, and wellbeing are then dealt with as a group, before a final themed section of personal interests, entertainment, and shopping.

In each of these themed sections, the analysis of data is based upon respondent 5-point skill rankings before receiving equipment (no skill, low skill, medium skill, high skill, and very high skill), which were then repeated within the phase 3 end evaluation after benefitting from the equipment. To analyse this data, two forms of complementary analysis are used. *Sign Testing* provides one form of analysis, which allows the evaluation to consider significance for change in skills. A total of 45 beneficiaries have completed both evaluation phases, and it is these individuals that the significance testing has been performed on. A confidence level of $p \leq 0.05$ was used to decide whether the null hypothesis (no change in skill as a result of *Get Connected Funding*) could be rejected. For a complete overview of *sign testing* results, please refer to the table provided within Appendix 4.

As discussed within the approach to analysis section of this report (see section 2.6), *Sign Testing* does have limitations, in terms of not providing a perspective on the size of digital skill change for individuals. To address this limitation within the evaluation, a second technique has been used to help expose differing levels of change for each skill ranking. To represent this size of change, divergent stacked bar charts for digital skill have been created in each of the following subsections. Before and after graphs are provided (unpaired), and when read together they help to characterise the spread and size of change for each skill considered.

Colour coding has been used in each of these divergent stacked bar charts, and each colour represents a particular ranking response from beneficiaries. As the colour representations used are consistent across all these types of bar charts, a key has not been provided with these to save repeating this information. When reading these bar charts, the key shown below should be used.
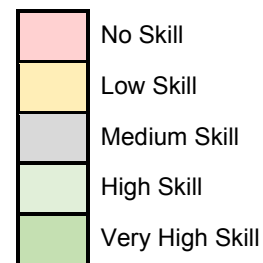
Figure 5.13 – Key for All Diverging Stacked Bar Charts Representing Digital Skill

In each of these bar charts, a separate horizontal bar is shown for each skill represented, and these are positioned in relation to a central mid-point dashed line that runs vertically through these skill bars. As such, each graph provides an easy to interpret weighting of response for the skills rankings presented in the key above. If more of the skill bar appears to the left of the dashed line, then this indicates a greater proportion of response for no or low skill rankings; and if more of the bar appears to the right of the dashed line, then this indicates a greater level of response for high or very high skill rankings. To support the reading of response weightings data labels are provided that give exact percentages of response, and each of these graphs will be discussed within the sections that follow.

Fundamental Application and Software Skill

In terms of being able to participate within digital life and use technology, data collected for evaluation asked beneficiaries to rank skills in areas that can be considered as being

fundamental competencies that underpin technology-based activities. An individual's ability in using operating systems can be considered as one of these, in terms of installing and configuring software for any potential activity, navigating to and within any software to enable use, as well as maintaining a functioning environment for completing digital technology activities. Similarly, internet browsing software and the ability to use search engines also has a fundamental role to play in the use of technology within a digitally networked society. All potential activities with technology covered within this report can be underpinned with information and resources found online, with browsing and searching being fundamental to this activity.

Before and after skill rankings exist within the data for internet browsing software (n = 39) and using operating systems (n = 38), and individual responses were paired to test for significance. Both of these reached the accepted p value threshold, with internet browsing software returning a value of greater significance (internet browsing software p = 0.001; using operating systems p = 0.005).

The diagram shown below provides a divergent stacked graph for both these skills from the gathered evaluation data, to illustrate the spread of skill responses before benefitting from the supplied equipment.
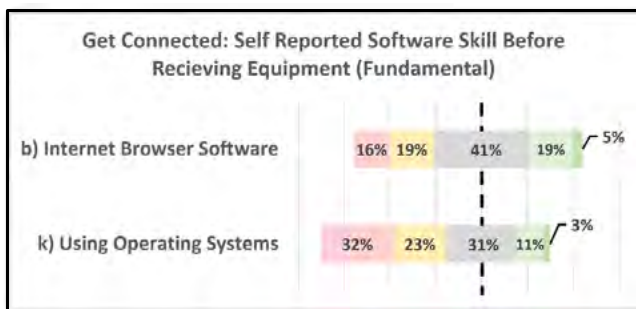
Figure 5.14 – Stacked Skill Bar Chart for Internet Browsing Software (n = 154) and Using Operating Systems (n = 154) Before Receiving Equipment

For these skills internet browsing software provides the more balanced spread of rankings, with a total of 24% positioning their skill as either high or very high, and 35% as no or low skill. For operating systems weighting to the lower end is much greater, where 55% of respondents gave no or low skill ranking, and only 14% rated their skill as being within the high or very high ranks. It is important to note here that each of these skill rankings provided by beneficiaries indicates a generic rating of skill that is decontextualised from specific activities, and these would vary further dependent on these possible contexts.

The data representation that now follows provides a divergent stacked graph for the same skills, to illustrate the spread of skill responses after benefitting from the supplied equipment.
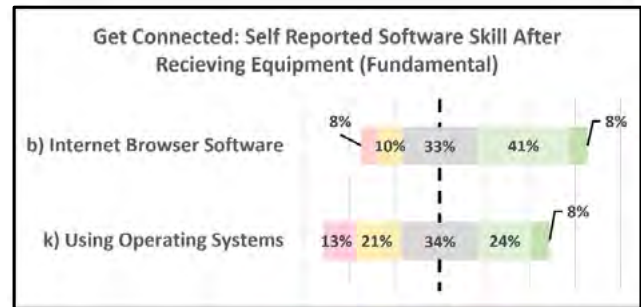
Figure 5.15 – Stacked Skill Bar Chart for Internet Browsing Software (n = 39) and Using Operating Systems (n = 38) After Receiving Equipment

As the diagram above shows, self-perception of skill rankings for internet browsing software is now firmly weighted towards the high end, with the total for no and low skill sitting at 18% (17% improvement), and high / very high skill rankings sitting at a total of 49% (25% improvement). Using operating systems now has a more balanced profile after benefitting from the equipment, with a total of no and low rankings now at 34% (21% improvement), and high / very high skill rankings at 32% (18% improvement).

Clearly, the test for significance and the stacked bar charts (before and after receiving the equipment) give a clear indication that addressing digital divides in terms of access have had a positive benefit on self-perception of skill in these areas. However, a greater concern exists for capabilities that can be attached to using operating systems, as after benefitting from the supplied equipment and using this for a period, the profile of responses still indicates a slight skew towards the lower skill rankings.

Although it was not possible within the evaluation surveys to consider before and after ratings for search engine ability, baseline data was gathered on beneficiaries' ability to use internet search engines such as Google and Bing. This question used a different rating scale when compared to other skills represented in the stacked bar charts (very poor, poor, satisfactory, good, very good), and the pie chart below provides a summary of responses to this part of the evaluation.
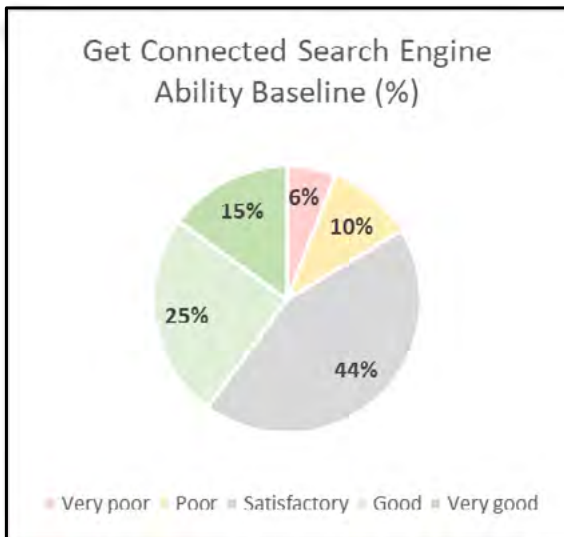
Figure 5.16 – Pie Chart Showing Beneficiary Search Engine Ability Ratings Before Receiving Equipment (n = 153)

As the chart above illustrates, beneficiary ratings are skewed towards the higher-ranking end, with 40% of respondents positioning search engine skill as being good or very good, and only 16% of respondents positioning skill as either very poor or poor. As with other data within this section, this ranking is not contextualised by search activity and beneficiaries were not asked about their ability to find a sift through sources of information to identify what is of value. In addition, self-perception of skill in relation to a very general question on the ability to use search engines is not providing any information on an individual's technical ability to conduct advance searching using Boolean operators or advanced search functionality. These can be considered as areas for evaluation development within future project work.

Employment

Given the economic development priorities for the region (Brown 2021), and how beneficiaries are likely to be excluded from jobs that require digital skills, this provides an important area to consider in terms of skills development. Although issues of employment might be seen as primarily applying to younger adults developing a career and working age adults who may be employed or unemployed, it is important to recognise that many older and retired individuals may also be seeking forms of work within the community. For all age groups, this might include unpaid or voluntary work within Stoke-on-Trent. As such, the data presented here (statistical testing and graphs) is provided for all respondents regardless of age.

Two questions were asked to all beneficiaries in terms of digital employability skill, which required respondents to rate

their ability in finding a job or doing work using digital technology; and using technology for education and training to help develop their careers.

For finding a job and doing work, statistical testing for significance provides the only result in this entire section on skills that does not reach the acceptable p value of 0.05 (p = 0.057). This has the lowest n value within significance testing (n = 25), which may help to explain a lower level of statistical confidence. For education and training to help develop a career (n = 36), the result was statistically significant when completing the paired testing (p < 0.001).

The diagram shown below provides a divergent stacked graph for beneficiary skill responses to these digital activities related to employment, to illustrate the spread of skill responses before benefitting from the supplied equipment.

Figure 5.17 – Stacked Skill Bar Chart for Finding a Job or Doing Work (n = 125) and Education & Training to Develop Your Career (n = 135) Before Receiving Equipment

For the self-reported skill in these digital activity areas, they provide very similar profiles that are skewed towards no and low skill ratings. Finding a job or doing work using digital technology has a total of 40% of responses rated at no or low skill, and 17% of responses rated as high or very high skill. Education and training to develop your career has a total of 39% of responses rated at no or low skill, and 19% of responses rated as high or very high skill. Given that finding a job can be linked to searching for job opportunities, this does indicate that self-ratings for searching for information (covered in the fundamental skills subsection) are likely to become much lower when ability to search is contextualised by an activity. However, this lower rating may also be explained by its combination with 'doing work', and further granularity within questioning would be useful to uncover a solid understanding in this area.

The data representation that now follows provides a divergent stacked graph for the same skills, to illustrate the spread of skill responses after benefitting from the supplied equipment.
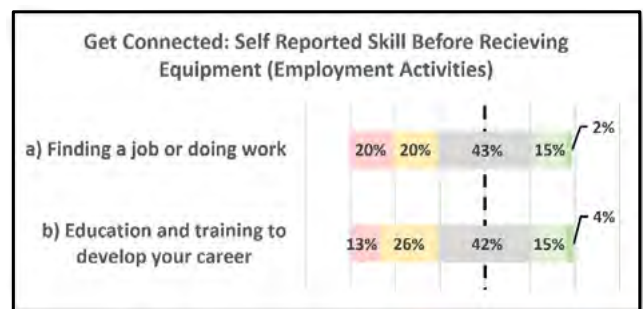
Figure 5.18 – Stacked Skill Bar Chart for Finding a Job or Doing Work (n = 27) and Education & Training to Develop Your Career (n = 36) After Receiving Equipment

At first glance and when comparing the data presented here to the previous diagram, there has been a greater uplift to digital activity skill ratings for education and training, when compared to finding a job or doing work. Education and training now has a total of 17% for no and low skill rankings (22% improvement), and a total of 44% for high and very high rankings (25% improvement). A much smaller change is evident when considering ratings for finding a job and doing work after receiving equipment. For this, a total of 30% responded with no or low skill (10% improvement), and a total of 30% responded with a ranking of high or very high skill (11% improvement). Nevertheless, finding a job or doing work does now have a balanced bar chart profile.

These results provide strong evidence of positive change within these skill areas, and this is further supported by open ended comments received as part of the evaluation:

"I am a single parent on low income - I am self-employed but due to covid my income has depleted significantly.

I need IT equipment to support my employment but currently cannot afford a replacement laptop and I am trying to manage using my phone. I would also like to support my daughter's education online but due to me being in receipt of working tax credits my daughter does not qualify for assistance. I am currently looking for additional employment and the equipment would support with job searches."

<div align="right">

Get Connected Beneficiary

</div>

"Need a laptop in order to prepare a CV to apply for jobs and online courses to help me get back into work after successfully completing a 3 month detox and inhouse rehabilitation program for alcohol and drugs"

<div align="right">

*Get Connected* Beneficiary

</div>

Although we do not have the evaluation data to confirm this, the skew towards the higher end of skill rankings for education and training to develop your career may be partly

attributed to opportunities for support provided by project partners. Additionally, this may also be related to the range of organisations that beneficiaries are receiving support from as marginalised individuals within the community (many of which appear as referee organisations on funding applications). Given these aspects of support, it is not surprising to see a greater uplift in terms of being able to access educational opportunities for career development.

To further supplement perspectives on skills for employment, three software skill areas are featured here that can be directly applied to employment circumstances: office applications, which are a key staple for any digitally enabled work environment; email, which still dominates working environments as the main form of asynchronous communication; and software to share files with others, which allows for teamworking on documents and files. It is important to note here that software to share files with others has greater prominence in working practices since the pandemic.

All these software areas went through paired testing for statistical significance to compare before and after skill rankings provided by beneficiaries. In all instances, this testing provided a high level of confidence for the provided equipment developing a change in skills, with office applications (n = 40), Email (n = 44), and software to share files (n = 41) all providing a statistically significant confidence level of $p < 0.001$.

When turning to the spread of responses before individuals benefitted from the equipment, the stacked bar chart below illustrates this for each of these software application skill areas.
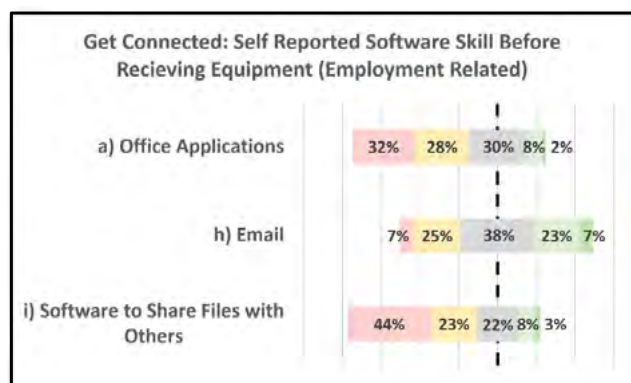
Figure 5.19 – Stacked Skill Bar Chart for Office Applications (n = 154), Email (n = 154), and Software to Share Files (n = 154) Before Receiving Equipment

The only relatively balanced profile for software skill in the diagram above belongs to email, where 32% of responses provided no or low skills rankings, and 30% of responses fell within the high or very high skill rankings. The other two profiles of spread are firmly skewed to the lower end, with office applications performing slightly better. For this, 60% of individuals provided a no or low skill ranking total and 10% of beneficiaries providing a ranking of high or very high skill. For software to share files with others, the no and low skill rankings provide a higher combined value of 67%, and a 11% ranking total at high or very high skill. Clearly, there is a more significant lack of confidence in using software that is prevalent in contemporary remote working, which is important to address for project working that seeks to improve digital skills for employment.

> *"I have one very happy lady at our centre today. She is thrilled with the offer of hardware so that she can learn at home."*
>
> Beneficiary Support Worker

When looking at these rankings for software before receiving equipment, and to a certain extent the after rankings for software in the diagram that follows, it is worth further considering these in relation to finding a job and doing work. These can all be considered as applications closely associated to this digital activity context but reported skill in these areas is much lower. This would seem to suggest that respondents have tended to overestimate their ability to find and do work in digital contexts when related software skill is considered. This emphasises the importance of developing software competency in relation to digital activities and may help to configure support around activity areas.

The data representation that now follows provides a divergent stacked graph for the same software skills related to employability, to illustrate the spread of skill responses after benefitting from the supplied equipment.

Figure 5.20 – Stacked Skill Bar Chart for Office Applications (n = 40), Email (n = 44), and Software to Share Files (n = 41) After Receiving Equipment

When first considering email within the diagram above, we can see that skill in this area in now firmly skewed towards the high and very high rankings (57% total, equating to an improvement of 27%), with a relatively small percentage sitting at the levels of no or low skill (13% total, equating to an improvement of 19%). This indicates that the provision of suitable equipment alone will allow individuals to become more comfortable with using this form of communication, and it would be useful for further evaluation work to also consider the ability of beneficiaries to stay safe within this area of software use.

For the other two software skill profiles these provide improved, but similarly skewed results towards the lower rankings. Office applications fair a little better, with a combined no and low skill ranking of 30% (30% improvement) and a high / very high skill ranking total of 25% (15% improvement). Software to share files with others had the lowest rankings for skill after receiving equipment, with 44% of responses within no or low skill (23% improvement) and 27% at high or very high skill (16% improvement).

For these software skills, there is a better skill uplift at the lower end of rankings, but this is not translating into an equivalent uplift for higher rankings (both have expanding medium ranking response). Clearly, access alone has a role to play in helping individuals feel as though they have the necessary skills for using these applications, but further input would be required to provide greater uplift.

Some of the above discussion and the use of applications in relation employment and educational development is also illustrated in the open-ended evaluative comments, and examples of these are provided below:

> *"I need support with form filling - especially online. To assist job searches etc. My whole family will benefit from the new skills I will learn. My own employment*

opportunities will increase because I will be more IT savvy. I will be able to deal with benefits agency local council - police etc easier. I will be able to support my son in his education"

<div align="right">Get Connected Beneficiary</div>

"This award would benefit me greatly. I would be able to do academic research and have use of Microsoft office and be able to complete modules on a laptop instead of trying to do this on my phone. [My biggest need is] being able to write essays for university. [After the award, the beneficiary stated] I can now use word and access online pages to research at ease and write essays."

<div align="right">Get Connected Beneficiary</div>

Although these areas of software skill are initially introduced in this employment section, it is important to recognise that they have a wider application to other digital activity areas, and it is recommended that the project partnership considers where these additional connections could be exploited for future development.

Financial, Family and Community

For this skills section, the areas of financial, family and community have been brought together to consider the skill competencies of beneficiaries within the data. Skills that relate to these areas have been provided in two data groupings, but it is useful to bear in mind cross connections between these. With the cost-of-living crisis impacting many marginalised and vulnerable groups, individuals and their immediate family would benefit from a closer management of their finances and online opportunities to save money on their outgoings. Evidence exists to suggest that the UK could be moving towards a cashless society, where the most vulnerable and excluded would struggle (Ceeney 2019). Although pandemic lockdown marked a downturn in the use of physical cash payments, evidence is now emerging that this has become a preferred method of payment to closely manage finances for vulnerable groups during the cost-of-living crisis (Jones 2022). Given that evidence exists showing that many businesses organisations are now more likely to refuse cash payments, such as the recent report from the *Which?* consumer group (Patchett 2021), this presents difficulties. Cash payments will mean that there is a more limited pool of purchasing opportunities, and individuals will be likely to miss cheaper prices and deals that are either only available online or via cashless payments. This emphasis on digital also translates across to the contemporary benefits system within the UK, where the preferred governmental payment method for these is via direct payment into bank accounts (Citizens Advice 2019). For a limited number of individuals that are unable to provide bank details for benefit

payments, a payment exception service exists to collect benefits in cash via a voucher-based system (Gov.uk 2022a). However, this service still primarily relies on the digital delivery of these vouchers, either via email or text message.

This increasing emphasis on digital finances has a clear connection to supporting wider family life, whether this is benefit payments to support family living or using online opportunities to reduce outgoings within a household. Given that the availability of high street banks and ATMs are in decline (Browning 2022), the ability of a family household to effectively budget and manage finances during the cost-of-living crisis is very much reliant on the digital. As such, access to online banking and the associated use of software to manage budgets can be seen as a priority for the digitally excluded.

Within the evaluations for *Get Connected Funding*, beneficiaries were asked to rank their ability to access social services and benefits, as well as their skills competencies in management their finances online. These were both taken through paired significance testing. Accessing social services and benefits (n = 38) returned the strongest measure of significance in terms of skill change ($p < 0.001$), and although managing finances online (n = 40) result was not as strong ($p = 0.004$), both values far exceeded the acceptable p significance threshold of 0.05. As such, addressing a digital divide in terms of access is undoubtedly beneficial for digitally excluded and marginalised groups.

The benefit of accessing services online in this and other areas was highlighted in these illustrative open-ended comments:

"My children will be carrying out research is help them complete their UCAS forms. One is just completing his A levels. To help complete school + college work. To enable us to keep up-to-date with information sent from school and completing paperwork all sent home digitally. For translation from Arabic to English to access gov't information e.g. covid regs. Purchase of travel tickets. Making appointments with GPs, out patient depts. To enable virtual interviews for university (or work). To participate [in] online banking"

<div align="right">Get Connected Beneficiary</div>

"Universal Credit so money doesn't stretch to anything more than essentials. Universal credit applications are all online and that's becoming difficult and I get really stressed and anxious when I need to reapply and reconfirm details as I know I'll have to do it on my phone which takes ages.

Tripled energy bills means buying devices even more difficult to do."

Get Connected Beneficiary

The diagram shown below provides a divergent stacked graph for beneficiary skill responses to these digital activities related to finances, to illustrate the spread of skill responses before benefitting from the supplied equipment.

Get Connected: Self Reported Skill Before Recieving Equipment (Financial)

f) Accessing social services and benefits   19% 26% 38% 14% 3%

g) Managing your finances online   26% 22% 35% 12% 5%

Figure 5.21 – Stacked Skill Bar Chart for Accessing Social Services and Benefits (n = 149) and Managing your Finances Online (n = 148) Before Receiving Equipment

Both these skill bar profiles provide similar perspectives that are skewed towards lower rankings. Specifically, accessing social services and benefits has a total of 45% of responses rated as either no or low skill, and 17% of responses rated at either high or very high skill. Managing your finances online has a total of 48% of responses at no or low skill ratings (with a greater proportion responding with no skill), and 17% of responses rated at either high or very high skill. Given the picture that has been painted at the start of this subsection and the likelihood of an increasing further emphasis on digital finances over time, this provides a picture of lower skill digital exclusion that needs to be addressed in relation to the cost-of-living crisis.

The data representation that now follows provides a divergent stacked graph for the same skills, to illustrate the spread of skill responses after benefitting from the supplied equipment

Get Connected: Self Reported Skill After Recieving Equipment (Financial)

f) Accessing social services and benefits   8% 28% 36% 15% 13%

g) Managing your finances online   15% 29% 24% 17% 15%

Figure 5.22 – Stacked Skill Bar Chart for Accessing Social Services and Benefits (n = 40) and Managing your Finances Online (n = 41) After Receiving Equipment

When first considering these bar profiles, some re-balancing is immediately noticeable when considering the previous skewed graph, with expanding top ends of response for both areas. Accessing social services and benefits now has a total of 28% of responses within the high or very high skill categories (improvement of 11%); and managing your finances online has a total of 32% of high or view high skills responses (improvement of 15%). When considering the lower end of responses for accessing social services and benefits, this provides a broadly similar improvement to the higher end of response, where 36% are rated within the no or low skill categories (improvement of 9%). However, when we consider managing your finances online a different picture emerges. In this area, a total of 44% have provided no or low skill rankings, which only gives a marginal improvement of 4% compared to responses given before equipment was received.

As such, the increase in higher rankings for managing finances online can be primarily explained by a reduction of ratings for medium skill (from 35% before receiving equipment, to 24% after benefitting from this). This would suggest that for individuals that have a low level of competency in managing finances online, addressing divides via access alone is less likely to have a meaningful impact on competency, and other interventions will be required. If a level of competency already exists for an individual, then providing access to digital technology is likely to suffice. It is also worth noting that both profiles are still skewed towards the lower end of skill rankings, and individuals would benefit from further interventions within both areas.

When considering software introduced for employment, it is important to return to these in relation to financial competencies. Specifically, email becomes a key tool for creating accounts and receiving communications online from organisations that individuals may be purchasing goods and services from. Additionally, benefit systems are making increased use of this as a primary method of communication, which includes the potential delivery of benefit vouchers that may be used in post offices and at pay points. As indicated within the evaluation data when discussing this in the employment subsection, the technical skill needed here can be considered as less of a concern and providing access to technology is likely to be enough to address competency. However, this skill ranking does not encompass safety and security issues that can be connected to this form of communication, and the issue of financial security and receiving scam messages will be further commented on within the Safety, Health, and Wellbeing subsection.

Office Applications also have a role to play in terms of managing finances, and this includes applications such as spreadsheets that provides a simple, but effective way of

managing finances and budgets; and word processing packages for formally writing letters to banks and other organisations in relation to financial management within a household. In terms of these office applications, 30% of respondents stated that their skill in this area remained within the no or low skill rankings after receiving equipment, and no respondents indicated a level of very high skill in this area. As such, this provides an argument for the contextualised development of application skill within the area of finance, in terms of how to manage digital finances and benefits online, and applications such as spreadsheets that can be used to support this activity. Here it is important to recognise that it was not possible to have a further level of granularity to skill for each individual office application within evaluation, and it would be useful for further project work to consider contextualised financial skill (such as organising and managing finances) and its relationship to working within office applications.

When moving on to supporting family life and engaging with the wider community and services, these digital activity areas can be seen as connecting with the area of finance. Supporting family life with a range of activities and doing so in a cost-effective manner during the cost-of-living crisis will be at the forefront of the minds of many people. Finding and accessing free services online can provide advice and support in areas of finance and family life, and services that require payment can be digitally researched and considered in terms of cost / benefit before they are accessed and used to support individuals and families. Engaging with a wider community, whether this is via local organisations or other individuals, now tend to have a significant online component. Most local organisations have an information presence online with opportunities to interact with others, and many communication forums exist that connect individuals together to discuss and support each other. In many ways digital technology has expanded the idea of community beyond the local, providing easy communication for support and active participation. These sorts of engagements within online digital environments help beneficiaries cope with life and difficulties that they find themselves in.

Three ranked skill areas have featured within phases 2 and 3 of evaluation data gathering that can be related to family and community, and each of these were tested for statistical significance in terms of skill change via paired testing. Engaging with your community (p < 0.001), accessing services online in general (p < 0.001), and supporting family life in general (p = 0.001) all have a very high level of statistical confidence that far exceeds the set p confidence level of 0.05. As such this also provides evidence that addressing digital divide in terms of access alone is likely to be of benefit to individuals here.

The data representation that now follows provides a divergent stacked graph for digital activity areas that can be related to family and community, to illustrate the spread of skill responses before benefitting from the supplied equipment.
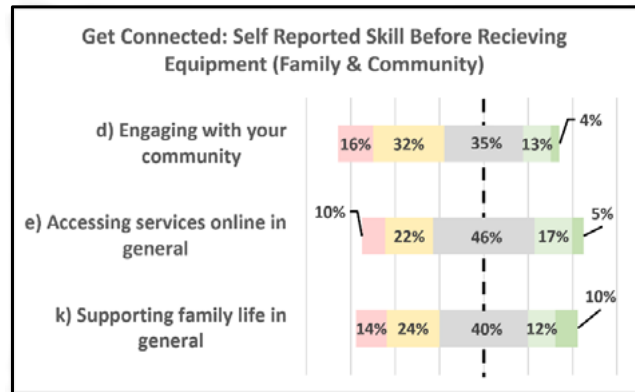
Figure 5.23 – Stacked Skill Bar Chart for Engaging with your Community (n = 152), Accessing Services Online in General (n = 153) and Supporting Family Life in General (n = 138) Before Receiving Equipment

All three of these bar profiles are skewed towards the lower end of ranking to differing degrees. Accessing services online performs a little better than other areas, with a total of 32% of responses sitting at the level of no or low skill, and a total of 22% of responses within the high or very high skill rankings. Supporting family life in general has a total of 38% responses within the low or now skill rankings, and a total of 22% for high and very high skill rankings. The worst performing out of the three relates to engaging with your community, where 48% of responses sit within the no or low skill rankings, and a total of 17% sitting within the high or very high skill rankings.

The data representation that now follows provides a divergent stacked graph for the same skills, to illustrate the spread of skill responses after benefitting from the supplied equipment. This follow-on graph from phase 3 of data collection illustrates a notable shift in the spread of skill self-perceptions.
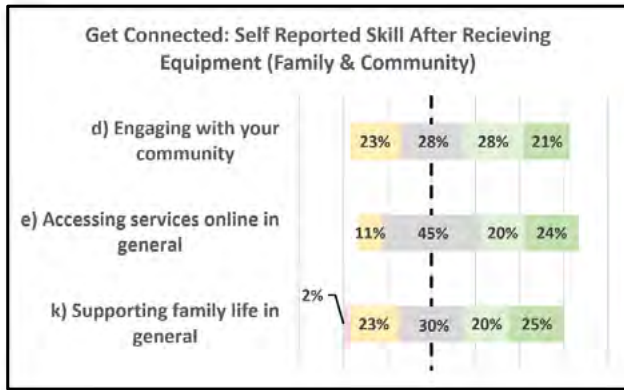
Figure 5.24 – Stacked Skill Bar Chart for Engaging with your Community (n = 43), Accessing Services Online in General (n = 45) and Supporting Family Life in General (n = 44) Before Receiving Equipment

What is immediately apparent from the bar profiles above, these are now all skewed to the higher rankings on the right-hand side, and only the area of supporting family life in general has small level of response within the no skill category (2%). Accessing services online in general still performs the best out of the three, with 11% providing a low skill ranking (21% improvement) and a total of 44% at high or very high rankings (22% improvement). Engaging with your community now provides the next best performing area, where 23% of responses sit at the level of low skill (25% improvement), and a total of 49% of responses are at the level of high or very high skill (32% improvement). Supporting family life in general now has a total of 25% of responses within the no and low skill rankings (13% improvement), and a 45% total of responses at the high or very high skill rankings (23% improvement).

The following illustrative qualitative comments below present some detail behind these statistics:

'Need it for collage work. Currently doing all my English classes on my wife's phone as my phone doesn't have internet. It's often not enough data for both of us. It's a struggle when trying to sort home office documents, solicitors etc. My 13-year-old daughter needs access to a laptop for school. It will help her improve her english and complete her schoolwork. We get a very basic income as asylum seekers so simply can't afford these. [Getting a laptop would therefore mean] It will allow us to do our English classes. It will support my daughter's education. It will support integration into UK life. It will help us feel less isolated as we won't be restricted to how often we can speak to family back home."

Get Connected Beneficiary

"This award will be very beneficial to my children and if given, it will help us all to continue our learning with ease. As well as stop the girls from their usual fighting, reduce the stress, extra time and expenses to get to college on the days there's no class, just to get my homework done and submit on time."

Get Connected Beneficiary

Although supporting family life may need some further attention within project work, it is evident from these graphs and quotes that most individuals feel as though they have some level of skill within each of these areas after receiving equipment. It has had an obvious benefit in supporting these activity areas online. Over time it is likely that competencies will further improve without additional support. However, where individuals may benefit is from others signposting resources and websites online that can support in these areas, which may be difficult for beneficiaries to find.

Applications for Multiple Digital Activities

For this subsection, a group of three software applications are discussed, which can be related to the prior digital activity subsections and the subsections that follow. Specifically, graphic design, video editing, and coding / programming software are covered here, which can be broadly applied to several digital activities.

Seeking specific types of employment provides connection to this set of software, where graphic design and moving image editing can be related to creative digital production and professions allied to this area. Coding and programming software has an obvious relationship with many technical professions allied to computer science, and all three areas of software skill can be allied to software application development. In terms of beneficiaries within the project and their levels of exclusion (digital and more widely), it would be tempting to perceive these areas as being situated beyond the capacities of the individuals, and more fundamental interventions are required before activity in these areas can be contemplated. However, this is not necessarily the case, as several organisations have emerged in contemporary times that challenge hierarchical perceptions of technical development.

An example of one of these organisations is Code Your Future, which has been setup as a non-profit organisation to provide opportunities to individuals on the margins of society to find work within the tech industry. There are no technical competency requirements to start on the training programme, and after completing the introductory modules, students are required to complete an 8-month course to become fully trained. During the course and after course completion, the organisation also provides support for individuals in finding work via industry contacts, and is enjoying a certain level of

success in supporting these individuals (some of which do not have English as their first language). The educational delivery of the course puts an emphasis on building supportive communities for successful completion, which illustrates how this type of education can be more broadly associated beyond employment to community building activities.

This connection from developing skill in these software applications to community can be further developed, in terms of how beneficiaries may want to attempt to engage with their wider community online. Online mediums for interaction, such as the use of social media to establish communication for community groups can be enriched using still and moving images to deliver meaning and information to others. As such, competency in creative software applications for graphic design and editing videos can move beyond employment to provide interesting and powerful ways of engaging within community.

This connection to sharing information within online community settings can also be broadened to developing digital and media literacies for beneficiaries (McDougall 2022). Understanding how information and messages are constructed via these creative applications, leads to an understanding of how others deliver meaning within online settings. This would also benefit an individual in terms of their ability to deconstruct messages they are consuming within online communities. Given the concerns that are arising in terms of the circulation of dis/misinformation and the variety of scam messaging that exists within online environments, this aspect of literacy has the potential to empower individuals to protect themselves online. Conceptualising this as a literacy for online safety also extends to coding and programming, as it can help to demystify the black box of algorithms and how applications can utilise data within online environments. As such, these software applications can be connected to safety, health, and wellbeing; and these aspects of literacy and safety can also be positioned as supporting family life and helping households stay safe.

Within the COVID lockdown scenarios that we have recently experienced the issue of supporting children's education within the family has become a more apparent issue for many. Alongside many excluded families lacking the right equipment to ensure reasonable engagement with remote schooling, many parents have been left struggling to support and supplement the educational fallout that was created by these circumstances. This includes understanding and supporting children within curriculum areas that connect with creative production and computer science. Although these lockdown issues have currently subsided, many will be wondering whether these issues will re-emerge with new

variants, other forms of infection, and the colder winter months that will make increasing infection rates possible.

These three areas of software applications have all been taken through paired statistical testing for significance in skill change, based upon beneficiaries' responses provided within phases 2 and 3 of data collection. Graphic design software ($p = 0.013$, $n = 36$), video editing software ($p < 0.001$, $n = 38$), and coding & programming software ($p = 0.013$, $n = 33$) have all returned significance values that exceed the p confidence level of 0.05. As with other subsections discussed here, this provides evidence that addressing a digital divide in terms of access is likely to impact on self-perception of skill in these areas.

The data representation that follows provides a divergent stacked graph for skill in these software applications, to illustrate the spread of skill responses before benefitting from the supplied equipment.
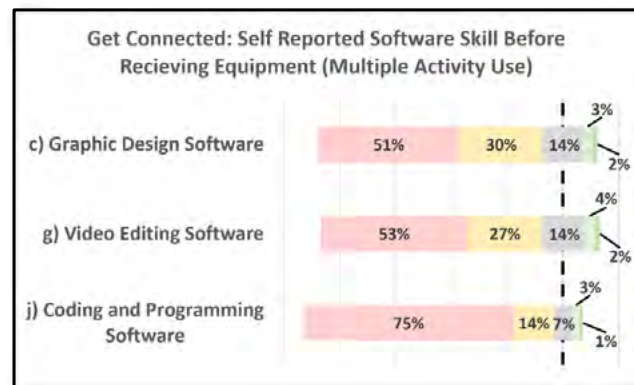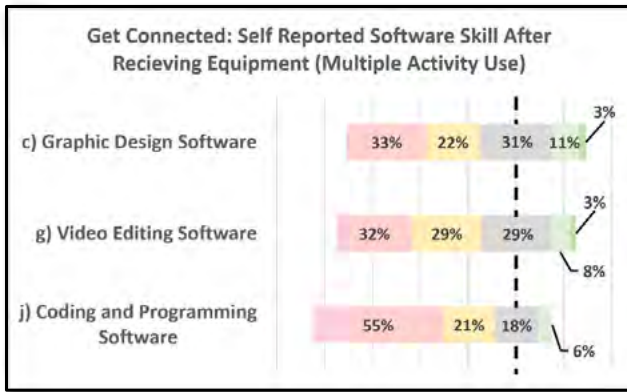

Figure 5.25 – Stacked Skill Bar Chart for Graphic Design Software (n = 154), Video Editing Software (n = 154) and Coding & Programming Software (n = 154) Before Receiving Equipment

What is immediately apparent from each of these bar profiles is that these are very strongly skewed data representations towards the lower skill end, with significant proportions of response within the no skill ranking. These skill rankings are the lowest rated out of all skills data collated for the project. The best performing profile relates to video editing software, which has 80% of responses within the no and low skill rankings, and 6% of responses within the high and very high rankings. This is closely following by graphic design software, where 81% of responses are within the low or no skill rankings, and a 5% total of responses ranked as high or very high. The lowest performing profile within this group relates to coding and programming software, where 89% of responses fall within the low or no skill rankings, with a large proportion of this sitting within the no skill ranking (75%). For this final bar profile, a total of 4% of rankings fall within high and very

high skill. Clearly these are problematic areas for the most digitally excluded, and many will perceive understandings within these areas as being far out of reach.

The following data representation provides a divergent stacked graph for these same skills, to illustrate the spread of skill responses after benefitting from the supplied equipment, which is drawn from phase 3 *Get Connected* evaluation data.

Figure 5.26 – Stacked Skill Bar Chart for Graphic Design Software (n = 36), Video Editing Software (n = 38) and Coding & Programming Software (n = 33) After Receiving Equipment

Despite all these areas providing an acceptable level of statistical significance in terms of skill change, it is immediately apparent that these are still heavily skewed towards the lower end of response. Graphic design software now becomes the better performing profile of the three, with 55% of responses sitting within the no and low skill categories (26% improvement), and a total of 14% now sitting within the high and very high categories (9% improvement). Video editing software now has a total of 61% of responses within the no and low skill categories (19% improvement), and a total of 11% within the high and very high skill rankings (5% improvement). The lowest performing profile after receiving equipment relates to coding and programming software, where 76% of responses still fall within the no and low skill categories (14% improvement), and 6% of responses fall within the high skill ranking, with no responses present for very high skill (2% improvement).

Although change in skill can be considered as significant in these areas via testing, these profiles illustrate a more marginal change in self-perception of ability when compared to other skills within this report. Although these diagrams indicate greater change at the lower end of the rankings, a comparable improvement effect is not apparent towards the higher end of the rankings. This relates to an expansion of middle skill responses and respondents only reporting small

improvements to skill within these areas, with graphic design software faring slightly better than the other areas.

Given the marginal gains apparent within the data for these areas and the lower n numbers for phase 3 data, it is important to recognise that significance and levels of improvement can be further questioned. It is possible that those responding to these questions that help to indicate marginal improvements in skill can be explained by a halo effect in research study. In terms of the project providing digital equipment, it is likely that some of these marginal gains in skill rankings could be associated to wanting to provide more positive perspectives on skill areas for the project to recognise provided support. It is likely that this halo effect is present to a degree within other areas, but improvements levels for other skills are substantial enough to argue that this will not be the primary reason for improvement. For these pieces of software, this is much less clear and although these areas can be self-supported online without a formalised educational input, supporting interventions from education professionals is more likely to be required.

The impact however of having access to more specialised software and laptops was clear for some beneficiaries, and it is important that the project has access to funding that can enable activities that can be associated to this type of software use. These quotes can be seen as being illustrative of this need and the desire to develop using software of this nature:

> *"I would massively appreciative for even the most basic of laptops. It would benefit me emotionally & mentally, because it would give me independent access to a computer, without needing to use the YMCA's and University's facilities. This would provide me with more time to work from home, and be much less stressful.*
>
> *However, a higher-end spec laptop would allow me to do much more than that. It would enable me, to really apply myself and scratch a personal itch that I've repressed for almost a decade now - journalism and content creating.*
>
> *In my spare time, I would relish the opportunity to create original media content, with regards to all the different Sub-Cultures that I'm extremely passionate about (for example Movie, TV show, & Book Reviews - Philosophy, History, Politics, and Socio-Anthropology, - Understanding and appreciating different complex cultures like China (outside of the Western Lens), - Gaming & the Everlasting development of Internet Culture - Evolution of Motorbikes, Cars, and our Roads - Biology, Health &*

Personal Fitness Transformation - Football and Combat Sports Coverage - Learning Self-Taught Piano and Guitar).The above may seem like an excessively large list, but I have genuinely fantasised for years about the multitude of unique videos that I could create - almost all of which, include perspectives that I haven't seen discussed elsewhere online. I have already created some channels years ago, simply to reserve their names, in case the opportunity to use them again, ever presented itself to me in the future."

Get Connected Beneficiary

"To reach my goal of gaining a degree in photography, it is essential I have good quality equipment. This would not be possible without this program. Not only would this help complete the degree, it would also serve well in the future when in employment as a photographer."

Get Connected Beneficiary

Given the situation outlined within the evaluation of these software applications, and data indicating that these areas can prove to be difficult for individuals, something more than addressing digital divide in terms of access is needed to support beneficiaries within this area. For those that have a desire to enter specific professions that use these skills, opportunities exist to use this as a core framing for developing technological skills, which will permeate into other areas of digital competency during their educational journeys towards these forms of employment. Although it may be tempting to see these within a frame of hierarchical learning that is not appropriate for the digitally excluded, evidence exists from other organisations that this should not necessarily be the case. As this subsection on skills has highlighted, these software applications can also help beneficiaries to engage and communicate with online communities of interest, especially with still and moving image production. This extends competencies beyond ideas of skill, into areas of digital literacy and the ability to deconstruct messages consumed online.

Safety, Health, and Wellbeing

This subsection deals with six digital activity skill areas that are connected to the closely related areas of safety, health, and wellbeing; and as each of these areas are considered, aspects of software application skill covered in other subsections will be drawn in where it is relevant to do so. Each of these area in isolation have numerous facets and relationships with other skill areas, and as skill evaluation has aimed to give quite broad perspectives on development, we cannot hope to get to the necessary levels of granularity to fully flesh out beneficiary development in this area.

Nevertheless, evaluation in this area should be supportive of formulating further project work.

Online safety provides a good example of a complex area that is a concern for those who are digitally active, regardless of whether the individual can be considered as digitally disadvantaged or not. Scams are becoming more prevalent and are constructed well enough to become convincing to many, where knowledge and understanding needs to be continually developed to help individuals keep safe in online environments. Scams can manifest in relation to the structural conditions that surround society, and those detailed within the introduction to this report are not exception. With the cost-of-living crisis on the minds of many, predatory individuals have started to exploit the situation surrounding governmental fuel payments (Ramsey 2022), which can be delivered to individuals via electronic means, such as via text and email. These types of scams that put individuals at financial risk can take many forms and appear in other contexts such as social media, where examples exist of predatory individuals gaining access to the social media accounts of others to pose as them and request money from their close contacts (Action Fraud 2022). Sometimes, scams may also target access to individuals bank accounts online, which provides connection to beneficiary's ability to securely manage finances. For many individuals who are digitally excluded, this can be a factor that discourages access to online financial management.

These aspects of online safety and scams also have a technical literacy component, which connects back to fundamental software skill dealt with at the start of this section. Individuals may leave technical vulnerabilities open to be abused by others, which encompasses understandings of how to ensure your operating system environment remains up-to-date and configured with safety in mind to reduce the risk of unauthorised access. These technical vulnerabilities may be initially exploited via several means, which can include encouraging an individual to click on a link that takes a user to a website that installs malware on the target machine, encouraging a use to install software that includes malware, and the propagation of a virus containing malware onto a target machine. Managing your own anti-virus software that is either embedded within operating systems or provided via a third-party software suite can be considered as being integral to protecting yourself in this area.

Engaging with online communities as a digital activity can support individuals with understandings within the area of safety, in terms of becoming aware of prevalent scams and support with protecting yourself online. Narratives that relate to others in the community experiencing these difficulties will generally have a lasting impact on others and help them to change their own behaviour online. However, online

communication and engagement with wider communities can also provide an opportunity for predatory individuals to strike up new relationships with others and groom them over time for exploitation. As with many online scams, this represents a way of taking advantage of individuals that has been within society for some time, which is now being realised through methods of online communication.

For parents and those responsible for others within families, risks of online harm and the real-world consequences of this is likely to be at the forefront of their minds. This aspect cuts across into areas of mental health and wellbeing, where high profile examples regularly appear within the media of suicide explicitly connected to engagements within online communities and environments. The more recent case of Molly Russell and her engagements with social media emphasise the role of online social media communication in her suicide (Milmo 2022). This case aptly illustrates that online safety in these areas extends past the individuals involved in communicating, and into the organisations that own and operate enabling communication platforms. As such, coding and algorithmic literacies (Williamson 2016; Carrigan & Sylvia 2022) can be considered as important understandings for beneficiaries (beyond the regulation of industry), as this type of literacy can support critical understanding as to why particular forms of content appears when interacting online. In relation to supporting a household in terms of safe online access, several software monitoring and filtering solutions exist (some of which are provided by ISPs), which can be of use to support the safe use of technology within family settings.

As this online safety discussion is starting to illustrate, these concerns can be overwhelming even for individuals that are familiar with online environments and risk. With the short narrative presented here, we are only beginning to scratch the surface on areas for concern, and there are many others that have not been covered at all (please see Gov.uk 2019 for further perspective on risk). For those that are digitally excluded, this can become a primary reason for not engaging, which presents a particular difficulty in supporting understanding in this area. Timely support needs to be in place to mitigate risk, but also needs to be mindful of how it may discourage interaction online, where possible benefits for individuals and families may be lost. It is important to note that although there are real risks that are of concern which technology can be explicitly connected to, it is a small minority of individuals within society that experience severe safety issues, and it is rarely technology alone that determines some of these negative outcomes. Media emphasis and reporting on these issues can tend to represent these issues within a moral panic frame (Cohen 2011), which may encourage a complete disengagement with online mediums on safety grounds.

Within the evaluation survey, two general questions were used to directly consider self-perception of skill for online safety, personally and within family / friendship groups. As with other digital activity skill areas, these were taken through paired significance testing for change, where a threshold p value was set at 0.05. Both skill in personal ability to stay safe online (n = 44) and supporting family / friends to stay safe online (n = 37) provided strong p values for significance (p < 0.001 and p = 0.001 respectively). This shows that addressing a digital divide in terms of access positively impacts on an individual's belief in their own abilities to manage some of the issues discussed here (although without further questioning on specific issues, areas for development cannot be identified).

To consider the spread of responses for these questions, the diagram below provides a divergent stacked graph for digital activity skill related to safety before benefitting from the equipment.
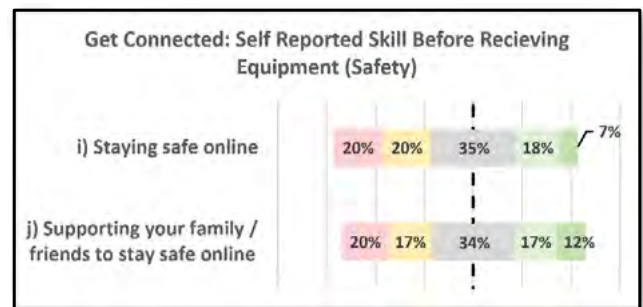
Figure 5.27 – Stacked Skill Bar Chart for Staying Safe Online (n = 153), and Supporting Your Family / Friends to Stay Safe Online (n = 111) Before Receiving Equipment

As with many other digital activities dealt with in other subsections, both these bar profiles give a skew to the lower end of skill rankings, and these two profiles can be considered as broadly comparable. Supporting your family / friends to stay safe online performed marginally better, with 37% of responses sitting within the no or low skill rankings, and 29% of responses sitting within the high or very high skills rankings. For self-perception of skill in personally staying safe online, a total of 40% of responses sit within the no or low skill rankings, and a total of 25% of responses sit within the high and very high skill rankings.

The following data representation provides a divergent stacked graph for these same skills, to illustrate the spread of skill responses after benefitting from the supplied equipment, which is drawn from phase 3 *Get Connected* evaluation data.
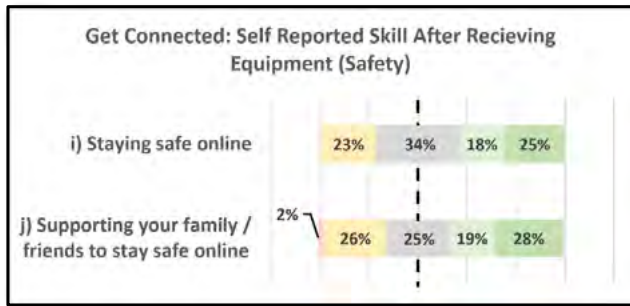
Figure 5.28 – Stacked Skill Bar Chart for Staying Safe Online (n = 44), and Supporting Your Family / Friends to Stay Safe Online (n = 43) After Receiving Equipment

What is immediately apparent from this data representation, is that there is an obvious skew for both bar profiles towards the upper ranking end for skill. Rankings for personally staying safe online now provides the slightly better skill profile, with 23% now reporting a low level of skill in this area and no occurrences of beneficiaries reporting no skill (17% improvement). 43% of respondents now rank this skill with high or very high rankings, giving a 18% improvement when compared to the same rankings before receiving the equipment. Supporting family / friends to stay safe online now has a total of 28% of responses within the no or low skill categories (9% improvement), and a total of 47% within the high and very high skill rankings (18% improvement).

Information captured in the following open-ended quotes provide more detail behind these statistics:

"I am on low income and cannot afford a computer. I want to upgrade my IT skills. I want to be able to support my children with their education [and]I want to be able to monitor my childrens on line activity to keep them safe. [with the award], I will be able to support my children's education as they grow older [and] I will be able to keep my children safe on line."

Get Connected Beneficiary

"[Beneficiary name] has gone from having a hectic household during lockdown to spending many hours on his own when schools reopened. He joined us at Carelink to help him meet people and engage in adult conversation during the day. He has avoided tech until now but being with the elderly at the Connect Club has awakened his curiosity and built his confidence in his ability to develop IT skills. His children are in their teens so building his IT skills and understanding will help him feel more confident in keeping them safe online. Plus be an asset for his own health and wellbeing"

Get Connected Beneficiary

When looking at the spread of change for supporting family / friends to stay safe online, there has been smaller shifts in self-perception of skill, with those previously indicating a medium level of skill before receiving equipment primarily accounting for the percentage improvement within the upper rankings. This would seem to indicate that for some who are responsible for others, they do not feel as though they are familiar enough with the online activities of individuals around them to effectively support safety issues. Reasons for this can also move beyond technical skill and competency with safety and may also relate to effective sharing and communication around issues within family and friend settings.

Given the strength of significance testing in these areas, and the shifting spread of ranked responses shown within the diagrams, this provides evidence to be cautiously optimistic regarding the benefits brought to individuals by providing access to technology. What is notable is that most individuals within the data report some form of skill as a result of being provided access to equipment, with only 2% of respondents reporting no skill for supporting family and friends to stay safe online. This gives evidence that access to equipment alone does provide an effective starting point to understanding how to address areas of safety, and it is likely that some individuals will then be able to support themselves and others as time progresses. However, the lack of granularity around these questions does mean that this must be treated with caution, and it would be expected that differing skill profiles would emerge with further detailed questions regarding online safety skill. Within educational contexts for online safety that are undoubtedly needed for a range of individuals, a nuanced and contextualised educational approach around safety topics is required, which is sensitive to the detail in this area and the anxieties that it may cause. Supporting family and friends and the smaller, but significant skill increases in this area would indicate that this is an area of that would be useful framing within education and training, and would also provide opportunity for theming skills development that relates to other skill areas within this report (for example, videogames and understanding risk and safety concern for younger members of the family).

With health forming the next aspect of consideration within the collected data, misinformation and safety helps to bridge into this related area. Although online contexts can be very supportive in terms of providing access to services and a wealth of information to support mental and physical health, information can be propagated that is either spurious or detrimental to good health outcomes for individuals. In contemporary times, concerns regarding the spread of misinformation in relation to the COVID pandemic has led to proportions of the population avoiding sound health advice in a belief that they are protecting health. This includes

misinformation from anti-vaccine campaigns that have circulated the belief that injections include microchips to track individuals and that 5G phone signals are responsible for transmitting the virus (Goodman & Carmichael 2020). Online communication platforms such as popular social media websites can be seen to be contributing to these perceptions, given the algorithmic reinforcing of information perspectives to end users. The monetisation of end users within these communication platforms is reliant on regular access, and what these algorithms filter for individual consumption will be based upon machine learning from prior interest. As such, these spurious and sometimes detrimental forms of health advice can be regularly served to individuals, creating an information bubble that reinforces a particular misrepresentation within individual belief. As such, coding and algorithmic literacy can help individuals understand the technical basis to these moments and help to see outside bubbles that may be created around them and their social circles. This point also relates to the situation surrounding the case of Molly Russell where the mental health, safety and wellbeing of this individual was (at least partly) compromised by the algorithmic serving of content within Meta's Facebook social media platform.

The above paints a concerning and difficult perspective in relation to safety and health, but it is important to re-emphasise that more extreme examples of risk are minority cases, and the use of digital contexts to positively support the health and wellbeing of individuals is commonplace. Again, if pandemic circumstances are used again as an example, many individuals during lockdown found themselves in a situation where their normal face-to-face support mechanisms became unavailable, and support moved to online environments. Health services such as those provided by GPs moved to providing online consultations to help restrict the spread of the virus, and individuals were directed to online sources of health information to support needs during the pandemic. Supporting mental health can also be broadened out and connected to more general online interaction and communication between family and friends, as well as supportive online communities. For those struggling with digital competencies and access, it was not possible to take advantage of these opportunities, impacting on the health and wellbeing of many during the pandemic. Although we are outside of lockdown scenarios, it can be argued that these digital approaches to interaction at the heights of the pandemic have left a lasting legacy. Employment, education, and service contexts (including those allied to health and wellbeing) have kept aspects of digital enablement that have been useful during these difficult periods, and the cost-of-living crisis has provided arguments that these provide more economical and effective alternatives to delivering specific elements of service. Mental health has

also emerged as a societal concern for the population in relation to the pandemic, given some of the lived experiences of isolation and loss in relation to the virus.

Two core questions were asked in relation to health and digital activity, both of which have been taken through paired statistical significance testing in relation to self-perception of skill change. Both the perception of skill in supporting own mental health (n = 44) and physical health (n = 42) returned very high levels of confidence in relation to the set p value of 0.05 ($p < 0.001$ in both instances). This high level means that it is likely that addressing a digital divide in terms of access will be of benefit to individuals in these areas.

To help consider the spread of responses for these questions, the diagram below provides a divergent stacked graph for digital activity skill related to health before benefitting from equipment.

Figure 5.29 – Stacked Skill Bar Chart for Supporting Your Own Mental Health (n = 151), and Supporting Your Own Physical Health (n = 150) Before Receiving Equipment

Both these bar profiles show a skew towards the lower end of rankings before receiving the equipment. Supporting your own mental health has a 43% total of responses within the no and low skill rankings, and a 22% total within the high and very high rankings. Supporting your own physical health has slightly less responses in both areas, and the similar position of the profile bar is related to a greater quantity of individuals providing a medium skill response when compared to mental health. A 39% total within the no and low skill categories is shown for physical health, and an 18% total within the high and very high rankings.

The following data representation provides a divergent stacked graph for these same skills, to illustrate the spread of skill responses after benefitting from the supplied equipment, which is drawn from phase 3 *Get Connected* evaluation data.
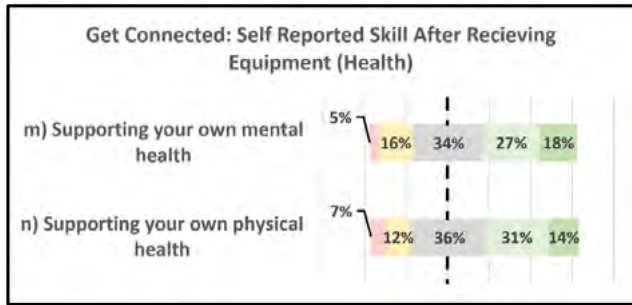
Figure 5.30 – Stacked Skill Bar Chart for Supporting Your Own Mental Health (n = 44), and Supporting Your Own Physical Health (n = 42) After Receiving Equipment

The diagram provided above now shows that after receiving the equipment, both these health-related bar profiles have a similar positive skew towards the upper end of skill response. Supporting your own mental health now has a 21% total of responses within the no and low skill rankings (22% improvement), and a 45% total within the high and very high rankings (23% improvement). Supporting your own physical health now has a 19% total in the no and low skill rankings (20% improvement), and a 45% total within the high and very high rankings (27% improvement). Clearly, these areas are seeing a great deal of improvement in self-perception of skill as a result of addressing a digital divide based on access.

The following open ended evaluation responses help to illustrate how the supply of equipment connects with and address mental health:

> *"[Beneficiary name] has recently taken full custody of his daughter. His daughter has additional needs and the family have a social worker. All meetings with [beneficiary name]'s daughters special school is online and so are social care meetings. [Beneficiary name] struggles to get much from these meetings. [Beneficiary's name] is also doing a CBT course and one to develop his emotions and manage them. [Beneficiary's name] wants to progress and develop with his personal development in the hope of getting into work."*

> *Get Connected* Beneficiary

> *"House doesn't have a TV aerial so we rely on the internet for leisure/entertainment which supports mental health especially as I can't really leave the house as often as I'd like. Group zoom calls for mental health support are inaccessible as I don't have a laptop"*

> *Get Connected* Beneficiary

In terms of evaluation data gathering, two further questions for self-perception of skill can be related to issues of health

from the data. Beneficiaries were asked to rate their ability to address issues of loneliness and isolation, as well as supporting own wellbeing. Loneliness, isolation and addressing wellbeing of an individual can be seen as areas that are closely linked to the mental health of an individual. However, these may also be a consequence of issues with physical health restricting an individual's ability to participate within society. An emerging example of this that is connected to contemporary pandemic difficulties are those individuals that have a physical health related issue, which means they have little choice but to shield themselves when rates of infection are high. Additionally, it is entirely possible that issues associated to loneliness, isolation and wellbeing may emerge within a variety of individuals, without any significant and diagnosed health issue attached.

Both these areas went through paired significance testing, using the p value threshold of 0.05. These tests provided very strong significance values to indicate change when addressing a digital divide in terms of access (p < 0.001), indicating that the *Get Connected* supply of equipment provides an effective starting point for many in this area. The benefits of equipment supply are further evidenced when considering the spread of responses for these areas, via the before and after divergent stacked graphs that have featured throughout this skills evaluation section. The following diagram gives bar profiles for addressing loneliness and isolation, as well as supporting your own wellbeing from phase 2 data gathering and before benefitting from the equipment.
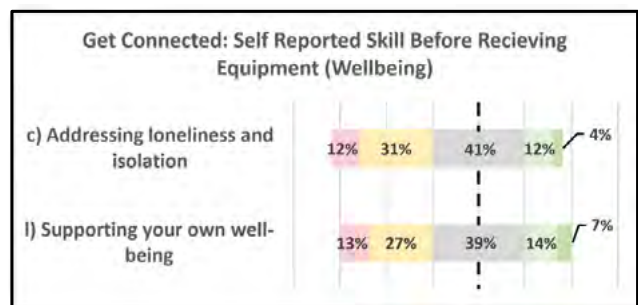
Figure 5.31 – Stacked Skill Bar Chart for Addressing Loneliness and Isolation (n = 147), and Supporting Your Own Wellbeing (n = 152) Before Receiving Equipment

As with other digital activities considered within this evaluation, that starting point for self-perception of skill is skewed towards the lower end of the rankings, with supporting your own wellbeing having a slightly better bar profile. For the latter, a 40% total is shown for the no and low skill rankings, and a 21% total exists within the high and very high skill rankings. For addressing loneliness and isolation, a

43% total exists within the no and low skill rankings, and a 16% total sits within the high and very high rankings.

The following data representation provides a divergent stacked graph for these same skills, to illustrate the spread of skill responses after benefitting from the supplied equipment, which is drawn from phase 3 *Get Connected* evaluation data.

Figure 5.32 – Stacked Skill Bar Chart for Addressing Loneliness and Isolation (n = 41), and Supporting Your Own Wellbeing (n = 44) After Receiving Equipment

Both bar profiles now show a strong skew towards the higher end of rankings, with no rankings at a level of no skill. Supporting your own wellbeing still has a smaller number of responses within the lower rankings, with 14% of responses at the level of low skill (26% improvement) and a total of 46% responses within the high and very high categories (25% improvement). Addressing loneliness and isolation now has 22% at the level of low skill (21% improvement) but has a 51% total within the high and very high skill categories (35% improvement). This now shows better ranking results at higher levels than addressing loneliness and isolation, with over half of beneficiaries reporting good levels of skill in this area. What is also notable about this level of change is that out of all the skills considered within this entire section, this represents the highest level of response at high and very high skill, as well as the greatest level of improvement after receiving the equipment. Many beneficiaries reflected on the impact of the equipment on reducing loneliness and supporting mental and health well-being. For instance:

"I have a disability which means I am stuck at home all the time. This is the only thing I do each week. If I don't have the internet I will be completely isolated. I use it to order my prescriptions, I use it for knitting patterns, I use it to contact the doctors, and I use it for video calls with my daughters. I also use alexa internet reminders as I can't remember things. Very low income on universal credit so I can't afford to buy a laptop. With the cost of living crisis I won't be able to renew my broadband contract next month. So from next month I will have zero internet access and I'm getting really anxious about this. I've looked at pay as

you go dongles but unfortunately the signal in the house is really bad so these haven't worked for us. The laptop I'm currently using is 8 years old so it's really difficult to get anything done."

Get Connected Beneficiary

"I am a disabled woman who lives alone none of my family live in Stoke on Trent. I experience isolation/depression and would like to stay in touch with my family and others more - has brought home to me that I need to be more computer savvy and understand new ways of staying connected. I would also use the equipment to make dr appointments and overall finance."

Get Connected Beneficiary

All the data presented here indicates that addressing a digital divide based upon access can provide significant support to many individuals, where it is possible that most beneficiaries will be able to develop support mechanisms for themselves online.

Other connections can be made to related areas within this skills section, and it recommended that partners reflect on where these connections lie, to help think about what further contextualised support is possible and needed for beneficiaries. For example, addressing wellbeing can be allied to following entertainment and personal interests online, which is dealt with in the following section. These connections may then help in providing training and support that proves to be attractive to possible beneficiaries.

Personal Interests, Entertainment and Shopping

The final skills subsection presented from the data, deals with beneficiary's self-perception of skill to support digital activities that relate to personal interests, entertainment, and online shopping. Although online shopping can be associated to supporting areas of entertainment and personal interests (via products and services purchased in relation to these areas), it also has an important connection to managing finances and ensuring that individuals and households are not paying more than they need to. For the digitally excluded within society, shopping online provides a broader pool of purchasing opportunity that can prove cheaper than high street retailers, but this advantage does need to be brought into a frame of managing finances. For many on tight budgets, cash can become the preferred option to managing finance, as it becomes easier to monitor and control outgoings. This can be juxtaposed within difficulty in terms of online purchasing and going over budget, when competency in monitoring expenditure is lacking and accessing financial digital infrastructures for managing personal finance represents a difficulty (Ceeney 2019: 24).

Online shopping can also be brought into the frame of issues that surround safety and security. This can be related to online fraud in terms of seemingly cheap products and services that may be offered online that are either not what they are made out to be or are not supplied to the customer at all. Fraud may also relate to communications and associated fake websites that are designed to harvest financial information from end users, which are important considerations in this area. Thankfully, technological developments within the main internet browsers and ISP security features have now significantly improved to protect end users in these areas. Nevertheless, it is important that end users are aware of these features and understand how to work with them, as well as other technological aspects to secure online payments.

In terms of digital activities that relate to entertainment and personal interests, it is important to recognise here that these can also be explicitly connected to addressing issues of mental health, loneliness, and wellbeing discussed in the previous section. Possibilities for a wide variety of technological entertainment exist, commonly enabled by access to the internet (such as online video, websites that enable sharing of photography, social media, videogaming and podcasting), which can all be supportive of mental health and wellbeing issues. Given that many of these entertainment opportunities can also be connected to active communities, pursuing these interests online can result in connecting with like-minded individuals, which may help to address issues of loneliness and isolation.

Within the collected evaluation data, two main skill ranking questions were asked in phase 2 to gauge self-perception of skill before receiving equipment, and these questions were then repeated in phase 3 after benefitting from the equipment to gauge change. When taking both skill rankings through paired significance testing, both returned values that far exceeded the stated p confidence level of 0.05. Going online for entertainment and personal interests (n = 44) produced the strongest p value (p < 0.001), and shopping to find the best deals online (n = 41) also provided a very strong significance result (p = 0.003). Both indicate that addressing a digital divide based on access alone is very likely to change self-perception of skill in both these areas.

For these digital activity areas, the following diagram gives bar profiles of the ranked responses from phase 2 data gathering that focused on self-perception of skill before receiving the equipment.

Figure 5.33 – Stacked Skill Bar Chart for Shopping and Finding the Best Deals Online (n = 150), and Going Online for Entertainment and Personal Interests (n = 151) Before Receiving Equipment

As with other subsections and the associated digital activities that have been considered, the bar profiles shown within this diagram indicate a skew towards the lower end of skill rankings, with going online for entertainment and personal interests performing slightly better when comparing the two. For this digital activity skill, a total of 31% of responses are within the no and low skill rankings, and the high and very high skill rankings have a total of 25% of responses. For shopping to find the best deals online, a total of 42% of responses are provided in the no and low skill rankings, and a total of 24% of responses sit within the high and very high skill rankings.

The following data representation provides a divergent stacked graph for these same skills, to illustrate the spread of skill responses after benefitting from the supplied equipment, which is drawn from phase 3 *Get Connected* evaluation data.

Figure 5.34 – Stacked Skill Bar Chart for Shopping and Finding the Best Deals Online (n = 41), and Going Online for Entertainment and Personal Interests (n = 44) After Receiving Equipment

In the diagram presented above, the bar profiles for self-perception of skill in both these areas now show a skew towards the higher rankings, and they have maintained a similar relative position to the rankings before receiving the equipment. For going online for entertainment and personal

interests, this digital activity now has 18% of response in the low ranking only (13% improvement) and 48% of responses within the high and very high rankings (23% improvement). This higher-level improvement within the higher rankings can be explained by a narrowing if the middle ranking of response between the two diagrams (44% reducing down to 34%). Shopping and finding the best deals online now has a 22% total within the no and low skill rankings (20% improvement), and a 47% total within the high and very high skill rankings (23% improvement).

Clearly, these diagrams indicate a spread of ranking response that aligns with statistical testing, in terms of access without further intervention supporting activity within these areas. The illustrative qualitative comments below support this, and help to illustrate cross connection in other activity areas:

> *"I volunteer with the Church and supported members who were shielding during covid with shopping. I have 2 knee replacements and limited use of my right arm due to a bad shoulder injury. If my health does decline, a laptop would enable me to do online shopping, allowing me to continue helping others and remain independent."*

Get Connected Beneficiary

> *"7 yr old son has arrived from Sudan about 7 months ago. He has no English and is struggling at school. A laptop would enable him to use extra English lessons on youtube and also to access English language entertainment and games to help him attain English more quickly and naturally. He feels isolated and sad at school and sits through some lessons not really able to partake because of his poor English. A laptop would also help him to keep in contact with his grandmother who raised him from birth. She still lives in Sudan".*

Get Connected Beneficiary

Nevertheless, an important point here is that online shopping and online entertainment that requires payment does need to be read in relation to financial skill. Assuming an easy transition to these digital forms of entertainment and purchasing may put inexperienced users at greater financial risk.

As well as asking beneficiaries to rank digital activity skill in these areas, data was collected for self-perception of skill in three types of software. Each of these software types can be explicitly linked to entertainment and personal interests, and all of these were tested for statistical significance. Videogames (n = 37) exceeded the acceptable p threshold of 0.05 by a good margin (p = 0.004), and both audio software for personal interests (n = 41) and photo software for

managing your own photos (n = 44) provided even stronger significance p values than this (both returned p values less than 0.001). As such, this significance testing provides good evidence for a perceived change in skill for all these software areas.

For these examples of software connected to entertainment and personal interests, the following diagram gives bar profiles of the ranked responses from phase 2 data gathering that focused on self-perception of skill before receiving the equipment.
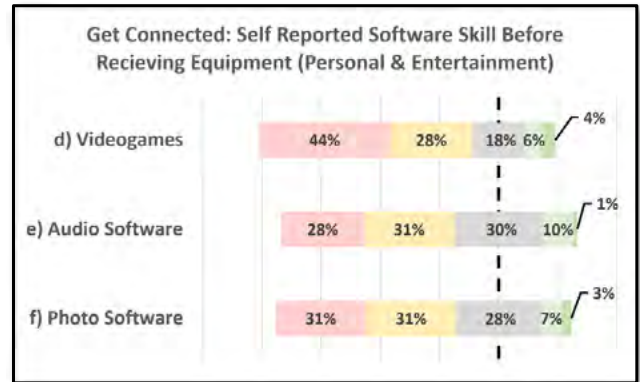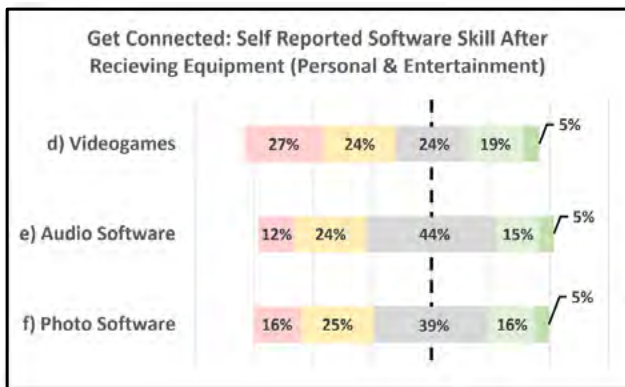

Figure 5.35 – Stacked Skill Bar Chart for Videogames (n = 154), Audio Software (n = 154), and Photo Software (n = 154) Before Receiving Equipment

In the diagram presented above, all these software applications provide a heavy skew towards to lower end of ranking response. Videogames provides the lowest rating of response, with a 72% total within the no and low skill rankings, and a 10% total of responses within the high and very high rankings. This is then following by photo software, which has a 62% total within the no and low skill rankings, and a 10% total within the high and very high skill. Audio software performs slightly better than this, with a 59% total within the no and low skill rankings, and a 11% total within the high and very high skill ranks.

The heavy skew towards the lower end of response is not so surprising for videogames, which is traditionally seen as a leisure pursuit of younger males within society, despite contemporary research indicating that games players are almost just as likely to be female and that older age groups can be just as active within this area. Where it is a little more surprising are the responses for audio to manage music and other types of audio and software to manage personal photos. With all the individuals applying for *Get Connected* equipment, most beneficiaries that appear within the data had access to at least a mobile phone, and it would seem reasonable to assume that many of these individuals will have taken photos to share with others. Additionally, using

software to manage and play music is a popular activity on mobile phones. Although it's not possible to fully understand this situation without further evaluation questioning, this may be related to individuals not connecting these common uses of mobile devices to the questions asked, or it may also relate to more complex uses of these mobile devices that they are not yet able to engage with (such as moving pictures to other devices and using basic photo editing functions in these applications).

The following data representation provides a divergent stacked graph for these same skills, to illustrate the spread of skill responses after benefitting from the supplied equipment, which is drawn from phase 3 *Get Connected* evaluation data.

Figure 5.36 – Stacked Skill Bar Chart for Videogames (n = 37), Audio Software (n = 41) and Photo Software (n = 44) After Receiving Equipment

Although there is an obvious shift in each of these bar profiles compared to the previous diagram, all responses on software skill in these areas after receiving equipment are still skewed towards the lower end. Videogames now has a 51% total of response within the no and low skill categories (21% improvement), and a total of 24% of response within the high and very high rankings (14% improvement). Photo software now has a total of 41% of response in the no and low skill categories (21% improvement), and a 31% total for high and very high rankings (21% improvement). Finally, audio software remains as the best performing skill, with a total of 36% of responses within the no and low skill categories (23% improvement), and a 20% total for high and very high skill rankings (9% improvement). As such, these improvements are mainly situated around the lower skill rankings, with an expansion of the medium skill responses in each of these software areas.

Clearly the data shown here does indicate a significant improvement by addressing digital divide based upon access but given the still relatively high level of skill responses within the no and low skill rankings, access alone is not going to

significantly improve self-perception of skill for a good proportion of beneficiaries. Results indicate that further intervention would be needed to support entertainment and personal interests connected to these software applications and given the lower ranking levels of skill response that are provided for software more generally, it is entirely possible that this view applies to other areas of software not covered within the evaluation. As already discussed, software covered here can be considered as moving beyond solely entertainment purposes, such as helping to address issues surrounding mental health and wellbeing, and it is possible to establish further connection to other areas covered in this evaluation.

5.7 Get Connected Funding Summary

For *Get Connected Funding* and the larger evidence base that this analysis has drawn from, this allows the evaluation to have a great deal of certainty that this has positively impacted on the lives of beneficiaries. This has been a difficult and involved aspect to the project and the *Staffordshire Foundation* should be commended for their work here, as well as all other partners involved with supporting this element of the project.

The challenges with delivering on a funding stream for digital equipment and connectivity are far reaching. This includes managing a tight budget over the life of the project, organising the cost-effective supply of equipment and software, ensuring that funding is appropriately targeted, and supporting the evaluation of beneficiaries. Given the parameters that are associated to this, we are of the opinion that this has been managed and delivered in the best possible way for beneficiaries of the project. As such, improvements in how this element of the project could be delivered in future work solely rest around the structural determinants to project work such as this, and where it might be possible to modify these for project delivery. This primarily centres around time and funding, as well as what resources are feasible to put in place to aid delivery.

Discussion within section 5.5 on equipment is illustrative of this, which sets out some of the problems that can be associated with the supply of equipment. This is not to say that participants did not recognise the benefits that this funding brought to them, and data suggests that this did meet their needs in the main. Issues can be associated to only being able to supply limited data dongles, due to a lack of feasibility in organising broadband connections for beneficiaries. In the cost-of-living crisis when individuals must make difficult choices on feeding themselves and heating homes, topping up an internet connection will not be high on their list. Clearly, and to properly address issues of digital exclusion for economic development, this is a situation that

cannot remain unaddressed moving forwards and cannot be solved within the context of project work conducted here. Similarly, the reliance on Microsoft for most digital work practices can act as a barrier to entering employment for the excluded. In the report, this is highlighted in relation to the close integration of Microsoft Office applications into workplace servers and systems, which emphasises the importance of understanding how to use these. However, it has only been possible to provide beneficiaries with 1-year subscriptions, and it is unlikely that individuals will be able to renew when they expire. Possibilities do exist for purchasing cheap one-off licences for specific versions of Microsoft's Office suite, but these are not available via retailers such as *Currys*.

Nevertheless, *Currys* have provided the project with a useful and much needed service in terms of equipment supply, which represented the only route possible for project delivery in this area. This meant that difficulties with establishing an equipment specification and the supply of equipment were effectively managed. However, it is also important to recognise that the commercial interests of an organisation such as this mean that certain elements of equipment supply may not best suit target beneficiaries. For example, the bundling of premium anti-virus software that will nag beneficiaries for further payment when it expires does not represent the best solution for cash strapped individuals. As such, arguments can be made for project partners to manage the installation of software, so that free and open-source versions of software can be provided to end users. This would provide less of a barrier to continuing use, but delivery in this way is contingent on proper time and resources being made available for delivery. Clearly, the configuration of the project did not allow for this.

Evidence exists to show that project delivery has been effective in targeting excluded groups for funding approvals. This includes good proportions of individuals that are experiencing economic deprivation and lack access to suitable equipment. This will be beneficial in terms of the region's economic development priorities (Brown 2021). Evidence also exists that this element of the project has been successful in engaging with females, which can be considered as a group that suffers from exclusion within tech industry workplaces. Supply of equipment has had a good impact on levels of confidence for beneficiaries, which is much higher than changes in confidence from the *Pop-Up Shop* context.

With a good proportion of discussion in this section centring on skills, there is evidence that development has been instigated as a consequence of equipment supply. This can be considered as an important first step for the most excluded individuals, as it is difficult to understand needs and desires for development, without having any practical experience of using technology. This provides the technical element of access for the first dimension of media literacy highlighted in section 2.6 (McDougall 2022). Statistical testing has produced significant results for skills change in all but one of the areas considered, and a good magnitude of change is clear within digital activity areas considered for this evaluation.

Where a disparity has been identified is with the software applications that are commonly used to enable digital activities. Levels of skill reported lags behind associated digital activity skills, which suggests that alongside providing further support in certain digital activity areas, a focus should be put on how software can be contextualised and worked with in relation to these. It is hoped that the detail provided within the skills section will be of particular use to the project partners and thinking about how further training and support could be configured around the skills understandings that have been generated.

Configuring this type of additional support is complex, which relates to the intersecting nature of skills within the presented sections, and how they also relate to each other outside of the themes established. The evaluation provided here has started to indicate some of these connections, but many more possibilities and variations exist, which are not possible to discuss within the confines of the work produced here. Alongside reflection needing to consider these skill connections, it also needs further thinking around who these competencies also intersect with the lives of individuals, and the varied intersecting barriers that they face (Souter 2022). This work should then help to produce further support that matches the needs and desires of beneficiaries, and we would suggest here that partnerships such as this are best placed to do this type of work. Doing so should then support the development of training and move change towards the development of competencies and media literacies across the dimensions of change highlighted by McDougall (2022).

For the above, we do need to recognise that the type of evaluation conducted here does struggle to move past providing perspectives on technical skill development, and further forms of evaluation would be needed to assess media literacy development for informed and active media use. It is fair to assume that a mix of beneficiary experience exists here in terms of how far this has been developed. Some individuals may have self-supported themselves with these literacies, whereas others may be completely lacking within these areas. As such, staying in contact and offering follow up support in a timely manner is essential in terms of uncovering problematic understandings and addressing them.

We feel that the evidence given here provides a strong narrative of positive change in terms of access, that can be further worked with in terms of configuring future project work. In terms of the barriers discussed within the DCMS report (2021: 6), there is a clear address of limited online experiences as a result of a lack of access, which provides an important building block for further support. It is likely that some of these individuals have then accessed further training and support for the digital journeys they are starting. There is evidence that skills development has occurred within the area of safety as a result of this element of the project, which will be supportive to vulnerable groups. However, given the complexities here and in other areas, it cannot be assumed that access alone is enough to support a positive use of technology, and work here needs to be built upon with further educational opportunity via project partners. This should then provide further support for positive change in relation to critical media literacy development when users have had chance to access on their own terms and develop understanding of need. This development of understanding will take a varying amount of time for beneficiaries based on the challenges that surround them.

6. Training

With Training forming the final section of main data reporting before turning to overall conclusions and recommendations for the project, this section provides perspectives from *Long Training* data gathering (lasting more than a day), and shorter *Bite Sized Training* that took less than a day to complete. This represents more restricted data perspectives than *Keele University* was expecting from the project, which relates to the difficulties associated to getting training off the ground detailed within section 2.4.

In terms of *Long Training* data perspectives, it has only been possible to collate and work with data in relation to a programme delivered by *Caudwell Children.* This training course was primarily aimed at 16–24-year-old beneficiaries for employment, which ran for several weeks during the project life cycle. This can be considered as a training programme that matches needs for skills and media literacy development, which is contextualised and adapted in relation to the participants through educational dialog. As we will see in the discussion of these beneficiaries, those involved with this training can be considered as being at a stage where readiness exists, which made it easier to run the programme of study.

For *Bite Sized Training*, these interventions were primarily formulated in reaction to the difficulty in recruiting to the expected training programmes, and it has been possible to capture data from three of these interventions provided by organisations. Running evaluations for this element of the project has not always been possible to do for partners, as the shorter and more informal nature of them did not easily enable the capture of survey data. This is an area that needs further consideration and reflection in terms of creating evaluation mechanisms that could be used within a partnership. This will not be easy to do, given the more ad-hoc and personally contextualised approach needed within

delivery. However, these can be considered as more aligning to broader development of media literacies for beneficiaries, within meaningful interventions for the digitally excluded.

In terms of the subsections included within this part of project reporting, perspectives from *Long Training* and *Bite Sized Training* have been separated out, and this relates to the different ways data has been collated in both these contexts. With Caudwell's *Long Training*, it was possible to gather evaluation data at the start of the training programme, and evaluation data at the end of training. For *Bite Sized Training*, a shorter one-off evaluation survey was used that was completed at the end of training. Further details on data gathered for training can be found within Appendix 1. Specifically, subsections 6.1 through to 6.4 deal with *Caudwell Children Long Training* data perspectives, and subsections 6.5 through to 6.8 deal with *Bite Sized Training*. These perspectives are then summarised within the final subsection. For both types of training, beneficiary data is discussed in terms what training was delivered, the types of beneficiaries within the dataset, change in levels of confidence, and change that can be seen in skills competencies. As such, evaluation provides perspectives on levels of change, but will also lead into broader exploratory evaluation work for future endeavour.

6.1 Organisation and Delivery – Caudwell Children Long Training

As discussed within the introductory section, it was necessary to re-orientate the starting direction of *Discover Digital* away from training and into *Get Connected Funding*, which was supported by the introduction of the *Pop-Up Shop* by signposting potential beneficiaries to this funding opportunity. Connected to this re-orientation, the *Long Training* programmes that were worked on and setup for project delivery struggled to recruit beneficiaries, and the majority of these were not viable to run in the time available to deliver the project. Space was created for the delivery of shorter training interventions, or more informal and individualised learning opportunities. However, it was possible for Caudwell's *Long Training* course to run where we were able to collect evaluation data.

Caudwell's *Long Training* project offering has remained the same throughout the life of the project, focusing on digital skills for employability. The programme of study that was setup for the project is based upon a course that was originally created by the organisation in 2020, which has been seen as a pioneering programme in this area for the individuals that it has been designed for. The programme has been designed for younger adults aged 16-25, who have a variety of disability and SEN needs, including autism. It is

hoped that individuals participating in these training programmes will be supported away from falling into the Not in Education, Employment, or Training (NEET) categorisation.

Alongside providing opportunities to develop digital skills for employability, the programme also aims to build confidence for the young adults who are benefitting from the course. Rather than focusing on show and tell, didactic forms of education, the provision seeks to promote socially constructed meaning through open discussion within workshops that allows learners to take greater control over their own learning. These group workshop sessions are then further supported by providing learners with 1:1 employment support over three months to cater for individual need.

Alongside the core employment and confidence building focus of the training, several other secondary areas of learning are brought into delivery. This includes work around British values, propaganda within digital media, general learning around social media, staying safe online, communication and relationships, as well as mental health and wellbeing.

6.2 Caudwell Children Long Training Beneficiaries.
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A small cohort of 12 learners participated within Caudwell's digital employability programme, and all these individuals were within the 16-24 age group. As part of the evaluation, data was gathered on the prevalence of disability, which is summarised in the graph below.
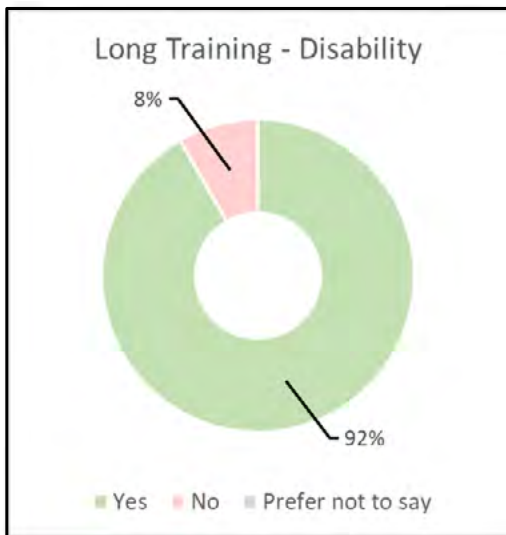
Figure 6.01 – *Caudwell Long Training* Beneficiaries Who Reported Having Disability (n = 12)

Within this data gathering context, it was possible to gather additional information on the day-to-day impact of disability, as well as whether an individual reported multiple types of disability. Out of these beneficiaries, 11 identified as having disability that impacted on daily life (92% of the cohort), and 8 of these self-identified as having multiple forms of complex need. The most common need type was social or behavioural for seven individuals, alongside mental health which was also indicated in the same frequency. Understanding or concentrating impacted on half of the cohort, and 5 individuals indicated memory impacted on their daily life. This focus on individuals with disability meant that needs could be more adequately targeted during delivery and through beneficiary discussion.

In the following diagram, a simple age and gender breakdown is provided, which covers the only age group involved with the training (16–24-year-olds). Again, the specific age group targeted will have undoubtedly helped with addressing need for the individuals involved.
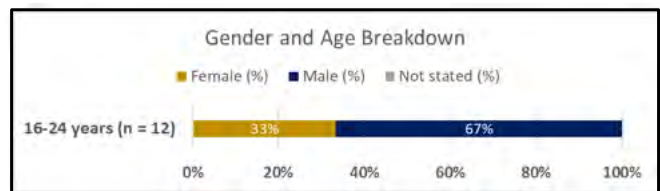
Figure 6.02 – *Caudwell Long Training* Beneficiaries Age and Gender Breakdown (n = 12)

As we can see from this diagram, the gender split is a little uneven and runs counter to data collected in other areas. 33% have identified as females, which does broadly align with the overall data perspectives for this age group, but when we turn to the data for *Get Connected Funding*, we can see that 67% within this age group identified as being female. Given that females can be considered as a group that should be targeted in relation to digital exclusion for employment within technical roles and production literacy development, this highlights a difficulty for the project. Although it would seem to be relatively easy to address divide based upon access for females, the same level of engagement is not seen in the training data here. This could be related to the gendered perceptions associated to training for employability, and this not being the domain of female participants (Margolis & Fisher 2002; Hicks 2018; Wong & Kemp 2018). As such, work is needed here to contextualise training possibility so that it can align with the development desires of females to help partners break through these heavily ingrained perceptions within society.

The diagram below summarises responses in relation to economic status of these *Long Training* beneficiaries.
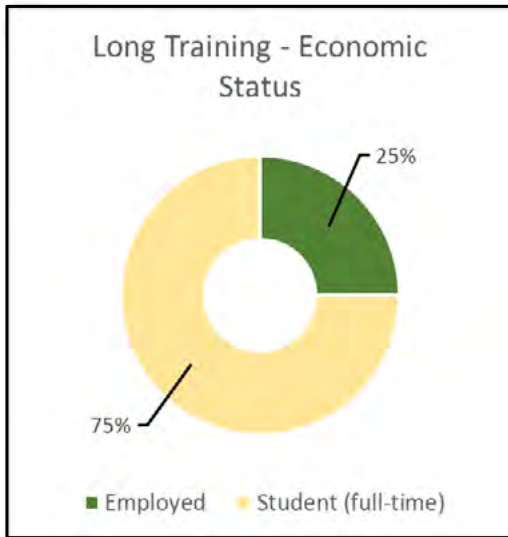
Figure 6.03 – _Caudwell Long Training_ Beneficiaries Economic Status (n = 12)

As we can see from the above, most respondents have indicated that they are currently students (75%), which begins to start to explain why they have been successfully recruited and have all completed this training programme. These individuals will all have current experience within educational contexts and will be used to the pressures and difficulties that will be attached to these. This can be juxtaposed with excluded older beneficiaries who have spent some time outside of educational contexts, where an increased level of difficulty with education may be apparent. Given the focus on employment, it is useful that 25% of the participants have current employment experience, as this will provide valuable input within a training context focused on employability. Out of these beneficiaries 4 of them (33%) are in receipt of benefits, and surprisingly this is not for PIP. All these individuals are claiming Universal Credit, which indicates that some work may be useful in terms of checking whether they are in receipt of the benefits they are entitled to.

Within this dataset, there are several indicators which suggest that these beneficiaries can be considered as being at a different point within their digital journeys, which also makes it easier to engage with a longer training programme. This relates to evidence on their current uses of technology, which is summarised with the rest of the diagrams and tables within this subsection.

Within all forms of data collection respondents were asked to provide a perspective on their average weekly hours using technology. For all data collected across project interventions, 17% indicated that they spend over 40 hours with technology per week and 10% indicated that they spend between 31-40 hours with technology. The largest category

of response was 11-20 hours, with 24% of respondents indicating that they fell within this category. To illustrate how this differed for _Long Training_ respondents, the diagram below summarises responses they gave in this area.
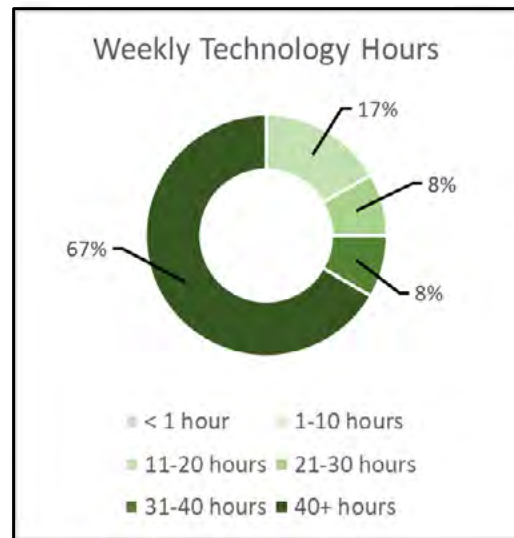
Figure 6.04 – _Caudwell Long Training_ Time Spent with Technology per Week (n = 12)

For the diagram above, 67% of respondents have indicated that they spend 40 hours or more per week using technology, with the next largest category being 11-20 hours at 17%. This helps to indicate that these individuals are already heavily invested in using technology when compared to other beneficiaries, and consequently, are more likely to understand their support needs and what training they require, when compared to others who have had little technology use at all.

The following figure summarises the amount of hardware that _Long Training_ beneficiaries have available to them, to access digital life, which will then be compared to the overall data perspectives.
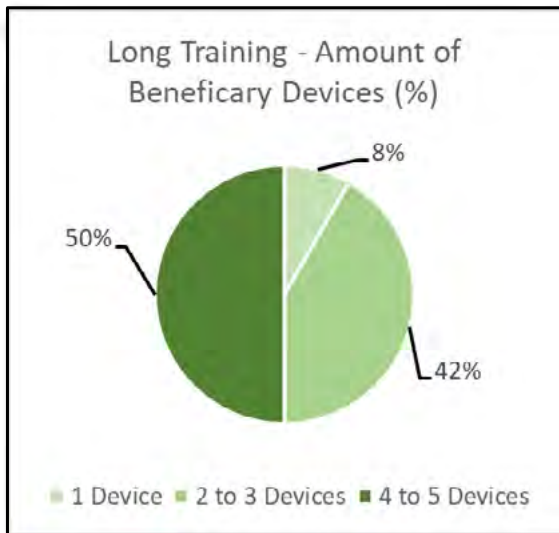
**Figure 6.05 – Amount of Hardware Devices *Caudwell Long Training* Beneficiaries Have Access To (n = 12)**

Most of these beneficiaries have access to 4-5 devices for participating in digital life (50%), and a good proportion (42%) have access to 2-3 devices. Only 1 individual (8%) indicated that they have access to a singular device. When compared to overall stats for all age groups and those aged between 16-24 (summarised in the table below), this indicates a greater use of devices when compared to the rest of the data.

	% of Beneficiaries	
Amount of Devices	16-24 (n = 43)	All Ages (n = 201)
1	21%	46%
2-3	35%	38%
4-5	42%	15%

Figure 6.06 – Table Summarising Quantity of Devices Owned from the Entire Dataset for 16-24 Age Group and All Ages

As the above table illustrates, data for *Caudwell Long Training* beneficiaries follows a similar pattern of increasing device ownership as overall data for the 16-24 age group, but at higher percentage levels. Data for this group of beneficiaries also far exceeds levels of device ownership when compared to all age groups. All beneficiaries within *Long Training* also indicated that they had satisfactory access to equipment or higher, and none of these individuals felt the need to apply for *Get Connected Funding*. As such, they have clearly surmounted access issues, which helps to build a narrative around these individuals being better prepared for longer training.

Alongside the number of devices that beneficiaries had access to, they were also asked to define their primary way of connecting to the internet. Data in this area is summarised within the following diagram.
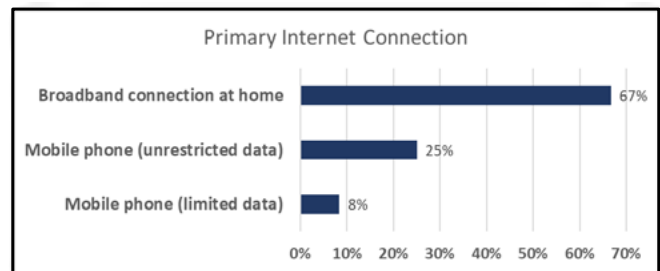

Figure 6.07 – Primary Internet Connection for *Long Training* Beneficiaries (n = 12)

Again, this helps to explain why these participants are at a different stage within their digital journeys, which feeds into the successful running of this training course. Most participants (92%) have a less restrictive broadband connection at home, or an unrestricted data connection via their mobiles. This means they already have suitable access and will already be potentially familiar with online resources that will support development within the area of employment. Not surprisingly, none of these individuals felt the need to get an internet connection via *Get Connected*, as this would not have provided any advantage over there current ways of connecting to the internet.

6.3 Change in Confidence Levels – Caudwell Long Training

With change of confidence levels featuring in each section of this report so far, some of the highest levels of confidence development can be found in relation to the *Long Training* intervention provided by *Caudwell Children*. However, this also indicates how training can negatively impact confidence for individuals when beliefs are challenged. The diagram below summarises levels of confidence that respondents provided when completing the evaluation survey at the start of the training programme.
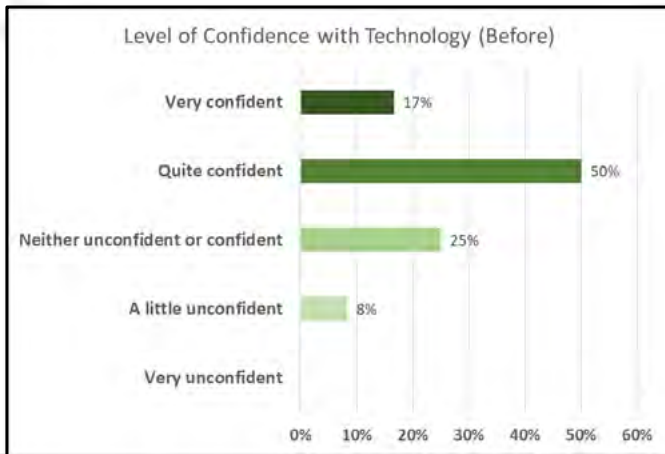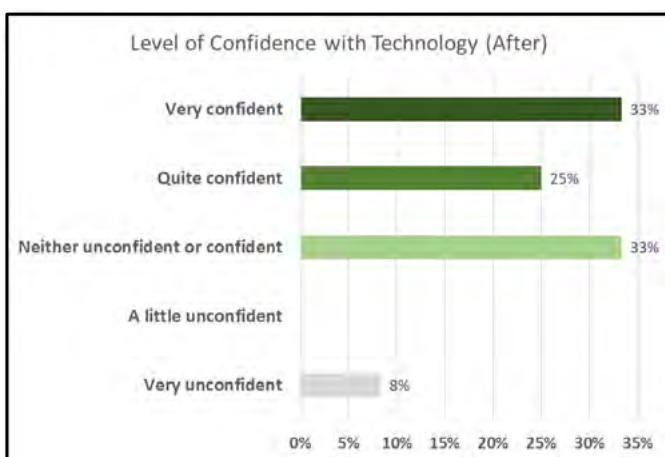
Figure 6.08 – Levels of Confidence for *Long Training* Beneficiaries Before Starting Training (n = 12)

Firstly, it is important to note here that these levels of confidence will more specifically relate to the area of employability, whereas confidence levels in other areas relate to more generalised perspectives on technology use within several areas. In terms of starting confidence, the perspectives shown here are better than those provided for *Get Connected Funding* and overall data perspectives, but they are also slightly lower than the levels of confidence given for the *Pop-Up Shop*. 67% of respondents indicated that they were quite or very confident with using technology, and only 8% indicated that they were a little unconfident with using technology. This shows good levels of confidence, which will have fed into the successful completion of the training by this cohort.

When then turning to levels of confidence after the training, this does show improvement for certain categories, but also shows a drop in confidence in other response areas. The diagram below summarises the data obtained in this area.

Figure 6.09 – Levels of Confidence for *Long Training* Beneficiaries After Training (n = 12)

Firstly, there has been a noticeable increase in confidence in terms of the highest category, where 33% have indicated that they are now very confident (compared with 17% before they started). The percentage of individuals that now sit within the quite confident bracket has reduced, and this can be partly explained by the increased level of response for very confident. However, it is obvious that not all of these respondents have increased in confidence, and this can also be explained by a drop in confidence level into the now larger neither confident or unconfident rating category (33%, compared with 25% before the training took place).

A little unconfident no longer exists as a category that has been responded to, but there has been a drop in rating to the very unconfident category (now at 8%). This indicates that the extended content delivered here can be a little more challenging to cope with, and that individuals do need some resilience to setbacks to see them through to the end. Nevertheless, it is likely that these confidence levels will change again over time, and after participants have had chance to put this learning into practice. Although the responses here are a little mixed, it is important to note that the most common open ended text response from beneficiaries stated that their confidence had improved because of the training provided by *Caudwell Children*.

6.4 Change in Specific Skills – Caudwell Long Training

In a similar way to the equivalent section for *Get Connected Funding* (section 5.6), data was gathered on self-perception of skill before beneficiaries started the training, and the same data was then collected again at the end of the training intervention. As before, respondents were asked to rate their level of skills in response to digital activities and software applications (no skill, through to very high skill within a 5-point ranking) and two forms of complimentary analysis were undertaken. *Sign Testing* was used to provide a measure of statistical significance within this training intervention, and it important to note here that with only 12 pairs to test, this does make it more difficult to reach the confidence level threshold of $p \leq 0.05$. The tests performed were two tailed to cater for a positive or negative change in skill, as negative change can indicate a useful reorientation in understanding, in terms of a realisation that skills were not as good as they had previously thought. These *Sign Test* results are summarised within a table in Appendix 5 and are also referred to within the sections that follow.

As this form of testing does not uncover the magnitude of change, these significance results are also supplemented by before and after divergent stacked bar charts for each of the skill areas covered. These help to give an unpaired summary indication of the size of change within skill areas, and when read together with significance testing, they help to provide further understanding. As the colour coding for skills rankings is consistent across all these graphs, the key provided below can be used.

	No Skill
	Low Skill
	Medium Skill
	High Skill
	Very High Skill
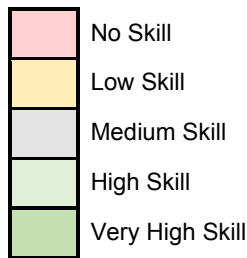
Figure 6.10 – Key for All Divergent Stacked Bar Charts Representing Digital Skill

One of the main differences between the section provided here and the equivalent section for *Get Connected Funding* are the skills that the data representations focus on. For the previous section that has been discussed in relation to funding, this could not be reduced to any targeted intervention, and all skill responses have been discussed. As the intervention provided by *Caudwell Children* is primarily concerned with developing understanding for employment, as well as having secondary elements of health and wellbeing, these areas have been focused on within the analysis.

Employment

Two questions were asked to all beneficiaries in terms of digital employability skill, which asked respondents to rate their ability in finding a job or doing work using digital technology; and using technology for education and training to help develop their careers. For finding a job and doing work (n = 12), statistical testing for significance on before and after ratings easily reached the acceptable level of significance ($p < 0.001$). For education and training to help develop a career (n = 12), this also reached the acceptable confidence p level of 0.05 ($p = 0.004$). For both skill ratings, no negative *Sign Test* results were received, which shows that all respondents reported a positive increase in skill. As such testing confirms that the primary purpose of the training has nicely supported individuals in seeking employment.

The diagram shown below provides a divergent stacked graph for beneficiary skill responses to these digital activities

related to employment, to illustrate the spread of skill responses before benefitting from the training.

Figure 6.11 – Stacked Skill Bar Chart for Finding a Job or Doing Work (n = 12) and Education & Training to Develop Your Career (n = 12) Before Training

For the self-reported skill in these digital activity areas, they both provide profiles that are skewed towards low skill ratings, but neither of these show responses that exist within the no skill category. These also show that the beneficiaries involved with this training have given themselves higher skill ratings when compared to the same data for *Get Connected Funding*. Finding a job or doing work does not perform as well, with 67% of responses sitting within the low skill category, and 8% of responses sitting within the high skill category. The better performing profile of education and training for career has 33% of responses within the low skill category, and 17% of response within high skill. This better performance could be related to the fact that most beneficiaries are already students, so they are more prepared to enter educational contexts for digital development.

The data representation that now follows provides a divergent stacked graph for the same skills, to illustrate the spread of skill responses after training was completed.
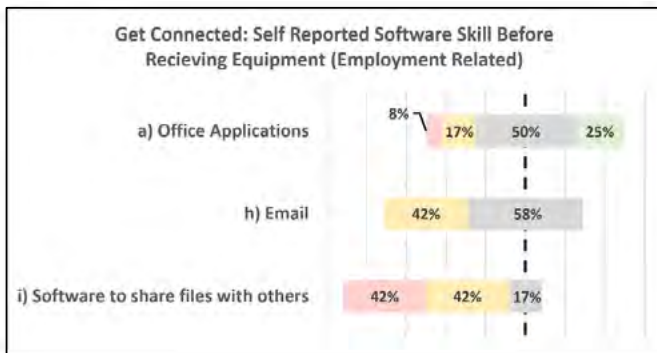

Figure 6.12 – Stacked Skill Bar Chart for Finding a Job or Doing Work (n = 12) and Education & Training to Develop Your Career (n = 12) After Training

Here, there is an obvious shift towards the higher end of ratings, with no ratings provided within the lower categories. In both skill profiles shown above, we can now see that 75% of the responses exist within the high and very high skill categories, with finding a job or doing work now giving the marginally better profile that has the greatest percentage within the very high skill category (58%, compared to 50% for education and training to develop career). This data can be considered as illustrative of the power of longer training interventions to support individuals, in the way that it has been targeted for these beneficiaries.

Three software areas that relate to employment have also been considered for this dataset in terms of skill. When considering software for *Get Connected Funding*, these consistently lagged behind the digital activity skill areas that they could be related to. However, a different picture can be painted here in terms of collated data and these software applications. For each of the three areas where respondents were asked to rate their skill, these have reached the acceptable p level of 0.05. The best performing of these is software to share files with others (p = 0.001), which is then followed by email (p = 0.004). Finally, office applications provided a p value of 0.016, which is still well within the accepted level. As such, the training provided here has supported a significant change in self-perception of software skills for employment.

The diagram shown below provides a divergent stacked graph for beneficiary skill responses to these three software applications related to employment, to illustrate the spread of skill responses before benefitting from the training.
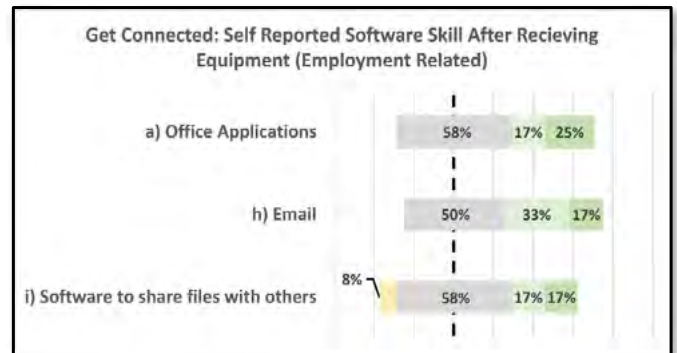

Figure 6.13 – Stacked Skill Bar Chart for Software Applications Related to Employment Before Training (n = 12)

Each of these show a slightly different skill profile, with office applications providing the highest self-perception of skill before training took place. This is quite a balanced profile with a 25% total of responses sitting within the no or low skill categories, and 25% sitting within the high skill category.

With the other two skill areas, both lack any response in the higher categories. Email fairs slightly better with 42% within the low skill category, and software to share files with others has a total of 84% within the no or low skill categories. Clearly there are some significant areas for development in terms of software skill for employment with these beneficiaries, regardless of their engagement with technology and their confidence with using it.

The data representation that now follows provides a divergent stacked graph for the same skills, to illustrate the spread of skill responses after training was completed.

Figure 6.14 – Stacked Skill Bar Chart for Software Applications Related to Employment After Training (n = 12)

As with the digital activities that relate to employability, each of these have a notable shift in skills ratings. Office applications and email no longer have any ratings in the lower categories, with email fairing slightly better with a total of 50% of responses within the high and very high skill categories. Office applications has a slightly lower total with 42% of responses within the high and very high skill categories. Software to share files with others is the only skill profile that has 8% of response within the low skill category, and 34% within the high and very high categories. What is notable here is the way that this longer form of training can address issues of software skill, when compared to individuals supporting themselves after the supply of equipment. Within the *Get Connected* data, when comparing software skill to associated digital activities these noticeably lagged behind in ranking.

Finally, we can also report from the open text responses that one beneficiary who had completed the training managed to find a job. We are confident that the work completed here has made a significant difference for these individuals and hope that similar employment outcomes will emerge for the rest of the cohort as time progresses.

Safety, Health, and Wellbeing

For the more secondary purpose of the training programme in areas of online safety and health, individual skill ratings were also considered to see how the training has helped to support individuals. Digital activity skill ratings for staying safe online and supporting mental and physical health were initially considered, and these were all put through *Sign Testing* to consider the significance of change. Out of these, only skill in supporting physical health reached the p value of 0.05, where a value of 0.039 was returned. Both staying safe online (p = 0.07) and supporting your own mental health (p = 0.18) returned values that indicate that there was not a significant change for individuals within paired testing. As we will see in what is to follow, this is likely to be due to the starting skill profiles for respondents in these areas and should not be used as a point of criticism for *Caudwell Children* training provision.

The diagram shown below provides a divergent stacked graph for beneficiary skill responses for these areas related to online safety and health, to illustrate the spread of skill responses before benefitting from the training.
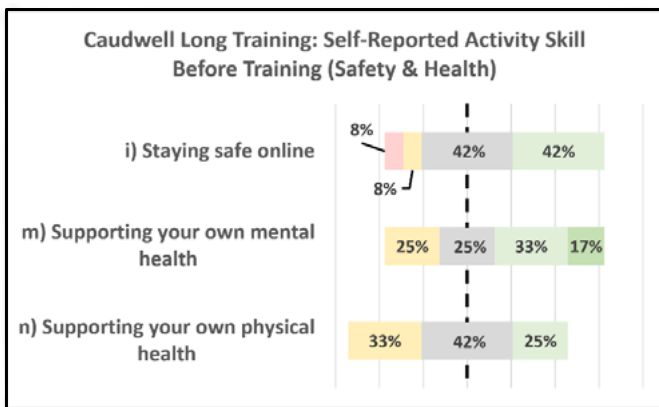
Figure 6.15 – Stacked Skill Bar Chart for Digital Activities Related to Online Safety and Health Before Training (n = 12)

From the diagram above, the best performing skill profile belongs to supporting your own mental health which is more balanced towards the higher skill rankings. This might help to explain the weaker significance performance in this area, as well as for staying safe online, which also has a profile balanced towards the higher end of response. Supporting mental health has a total of 50% of response within the high and very high categories, and 25% of response within the low skill category. Staying safe online has 42% of response within the high skill category, and only 16% of response within the no or low skill categories. Supporting your own physical health is the only profile that is more balanced towards the lower end of response, with 33% within the lower

skill category, and 25% within the high skill category. As such, this balance towards the lower end helps to explain why statistical significance was found within this area.

The data representation that now follows provides a divergent stacked graph for the same skills, to illustrate the spread of skill responses after training was completed.

Figure 6.16 – Stacked Skill Bar Chart for Digital Activities Related to Online Safety and Health After Training (n = 12)

Although certain areas do not reach the required level of significance, all these profiles have noticeably shifted to the upper end of response. Additionally, none of these profiles include responses within the no or low skill categories. Staying safe online performs best within the high and very high rankings with a total of 67%, followed by supporting your own mental health with a total of 58%. Supporting your own physical health then has a total of 50% within these upper ranking categories. As such, we can have a great deal of confidence that these secondary purposes have been met and that learners have been suitably supported in these areas.

Finally, responses gathered for addressing loneliness and isolation, as well as supporting your own wellbeing were considered. These were also put through testing for significance and supporting your own wellbeing (p = 0.039) reached the required p value of 0.05. For addressing loneliness and isolation, the returned p value (p = 0.18) did not reach the required confidence level, so cannot be considered as significant. As such, it is important to consider the skill profile for addressing loneliness and isolation, to see if the starting skill of respondents provides an explanation for this.

The diagram that now follows provides a divergent stacked graph for these digital activities, to illustrate the spread of responses before training started.

Figure 6.17 – Stacked Skill Bar Chart for Supporting Wellbeing and Addressing Loneliness and Isolation Before Training (n = 12)

As we can see from the above, it is not likely that a lack of significance in testing for addressing loneliness and isolation is resulting from a high starting skill within this area. A good proportion of responses sit within the low skill category (33%), and a total of 41% of ratings sit within the high and very high categories, which provides a fairly balanced profile. Supporting your own wellbeing is more skewed towards the upper end of skill, with a 50% total sitting within the high and very high ratings, and 17% sitting within the low rating response. As such, another explanation is required for this lack of significance, which is further reinforced by the reported level of skill after training, illustrated within the next diagram.

Figure 6.18 – Stacked Skill Bar Chart for Supporting Wellbeing and Addressing Loneliness and Isolation After Training (n = 12)

Within the diagram above, we can see that although addressing loneliness and isolation no longer has any response within the lower ratings, middle responses have greatly increased, and the higher level of skill response has reduced. For this skill we now only have 27% of responses sitting within the high skill category, compared to 41% of response sitting within the high and very high categories before training took place. For supporting your own wellbeing there is clearer improvement, with 50% of responses sitting

within the high and very high rankings, and none of the responses sitting within the no or low skill rating categories.

For addressing loneliness and isolation, it is possible that respondents were overestimating their ability in this area before training took place, and the training has helped them realise that this self-perception of skill is not as well established as they first thought. Bearing this in mind, it is possible that the training has been successful in supporting understanding in this area and rebalancing these perceptions of ability. Given that these beneficiaries are more engaged with technology and show higher levels of confidence than beneficiaries from other areas, this might help to explain an overly positive set of ratings before training took place.

6.5 Organisation and Delivery – Bite Sized Training

As discussed within the introductory section (section 2.4), *Bite Sized* interventions (lasting less than a day) became an ad-hoc and less formalised approach to training provision by project partners, in reaction to the lack of recruitment on longer training courses. Given these difficulties, and the difficulties found by project partners in terms of collecting data in these contexts, only 26 responses were available for consideration in this area.

Data perspectives presented here are from three differing forms of training provision. *Staffordshire University* provided fundamental skills training for those in receipt of equipment, and with only 2 responses received in this area, this helps to illustrate the difficulty that project partners had with encouraging individuals to complete evaluation surveys. As such, there is little benefit in doing specific skills development breakdowns for this area. *Caudwell Children* organised *Bite Sized Training* provision for digital employability skills which accounts for 14 respondents. It is important to note here that these were not a reaction to lack of beneficiary sign up, and these interventions were planned in terms of their training provision.

Beneficiaries from training provided by *Stoke College* make up the rest of respondents (10 survey completions), and these do relate to a change in provision that they were required to do. They had originally been contracted within the project to engage with 200 parents on three differing but connected longer training modules - Essential Digital Skills, Online Safety, and Online Learning. To recruit individuals to these modules, the intention was to engage with the wider community surrounding their educational institution, connected to the learners (aged 16-18) that were already taking educational programmes at *Stoke College*. The idea behind each module was to help guide parents through the

basics up to a point where they would be able to understand what their children were doing online in terms of their college work and be able to offer support and encouragement. After posting letters out to over 1500 parents to promote this offer, not a single response was received, and a different approach was needed.

The *Pop-Up Shop* provided the first opportunity for *Stoke College* to change their delivery approach. Bringing together training partners within a physical setting alongside beneficiaries gave opportunity for collaborative training drop-in's and for appointments to be made for specific session delivery. Shorter *Bite Sized* sessions that centred on online safety were also delivered to ESOL learners studying English within the college, and educators from the institution were also able to deliver shorter forms of training for beneficiaries that was connected to partner communities. The decided focus of online safety for these shorter sessions was found from discussing possible training with intended beneficiaries. Where possible, beneficiaries were encouraged to use the facilities at libraries to help maintain and develop the skills they had developed.

During delivery, a key barrier identified by *Stoke College* to online activity was physical access to the internet. Quite often the beneficiaries did not have the hardware or access to broadband due to the cost, and an uncertainty in what would be best for their needs. Beneficiaries also expressed the view that that they were doing fine without needing to go online.

6.6 Bite Sized Training Beneficiaries

To help characterise individuals who have taken advantage of the *Bite Sized Training*, several illustrations now follow that have been drawn from all three of these providers. The graph that immediately follows provides a breakdown of age and gender for these respondents.
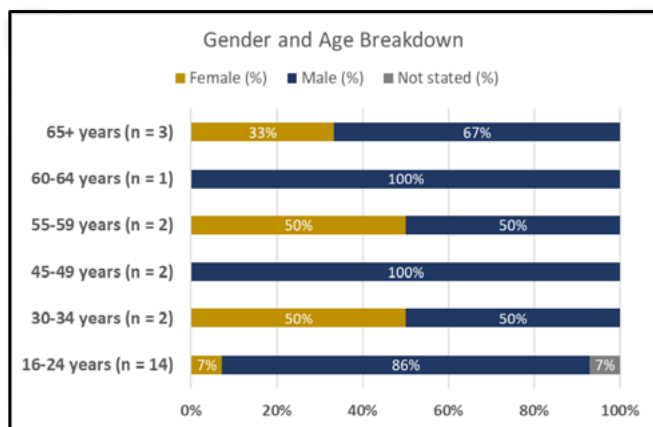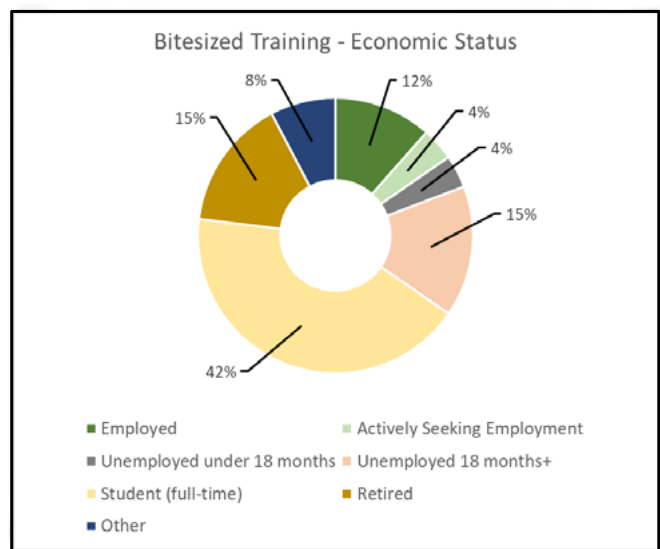

Figure 6.19 – *Bite Sized Training* Beneficiaries Age and Gender Breakdown (n = 26)

Although it is difficult for the evaluation to draw any solid interpretations on training due to the limited picture it provides for activity within this area, it is worth commenting upon the balance of males and females within the dataset. Overall, there is a much higher percentage of males which account for 73% of response. As with the *Long Training* intervention, this would seem to suggest that gendered perceptions exist in terms of technology (Margolis & Fisher 2002; Hicks 2018; Wong & Kemp 2018), and project partners need to find mechanisms and framings to encourage increased participation from females. Age groupings have a strong orientation to 16–24-year-olds, and this is primarily related to *Caudwell Children* targeting this age group for their *Bite Sized Training* interventions. As such, it is not possible to read too much into the balance of age groups here.

Responses also indicated a high prevalence of disability within the data (80.8% indicating yes), and this can be attributed to participants within all forms of *Bite Sized* training provided. For individuals that had disability, almost half of these respondents reported having multiple factors that impacted on daily life and more complex needs. The most common form of disability reported within this data was socially and behaviourally orientated (such as autism and ADHD) with 9 responses, closely followed by disabilities associated to learning (8 responses) and then mental health (7 responses).

The following diagram summarises the economic status of respondents for all *Bite Sized Training* beneficiaries within the dataset.

Figure 6.20 – *Bite Sized Training* Beneficiaries Economic Status (n = 26)

The diagram above indicates a high prevalence of students within the dataset, and all these individuals are associated to the provision of *Caudwell Children*. Given that this training provider targets younger individuals who are more likely to still be in educational contexts, then this is to be expected. However, given the skew this produces towards students within the data, it is difficult to provide any further interpretations to this representation. 35% of the individuals within this dataset are in receipt of benefits, which does indicate a suitable targeting of financially excluded groups within the cost-of-living crisis. This percentage is broadly equivalent to what is seen within the *Long Training* data but is understandably less than the prevalence of benefit claimants within the *Get Connected* data.

When considering data on device ownership and opinions on whether respondents have access to the right equipment, we can see that these beneficiaries where in a situation that made them better prepared (in terms of technology access) to take forwards learning for these shorter forms of training. The following diagram summarises the quantity of devices owned by beneficiaries.
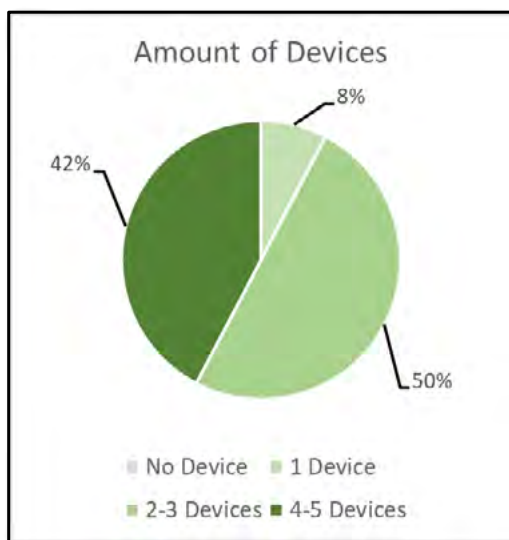
Figure 6.21 – *Bite Sized Training* Beneficiaries Amount of Technology Devices Owned (n = 26)

Given that it is important for individuals to follow up learning within the home after training has been completed, having access to suitable devices to do this is an important consideration. For the data represented above, access does not seem to be an issue for this group of respondents, as 92% of these individuals have access to 2 or more devices for continuing their learning.

The following diagram provides the last data representation for this section and summarises responses on whether individuals have access to the right equipment.
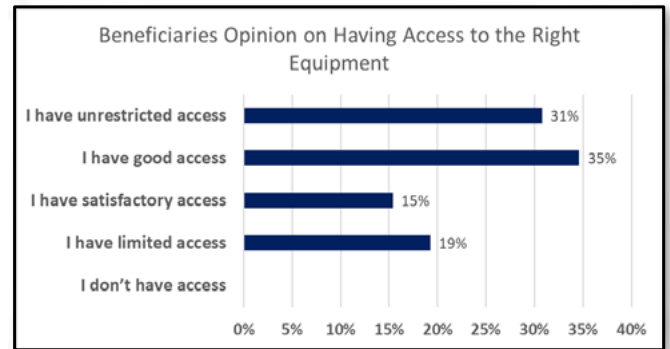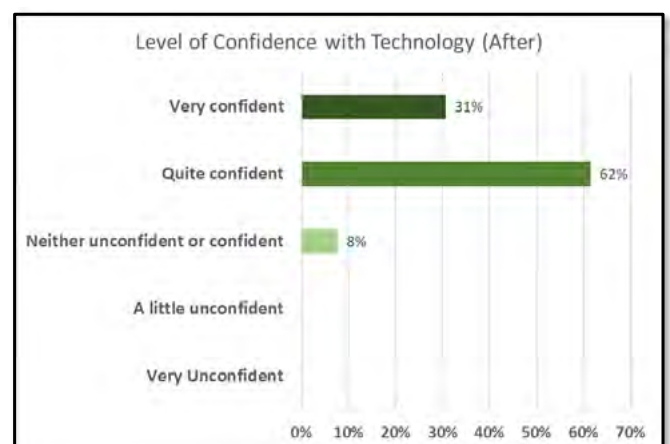

Figure 6.22 – *Bite Sized Training* Beneficiaries Response on Whether They Have Access to the Right Equipment (n = 26)

As the diagram above shows, most individuals (81%) are of the opinion that they have satisfactory access or higher to equipment for their digital lives. Here it has not been possible to trace whether some of this equipment has been provided via *Get Connected Funding*, as it was decided that it would be better to configure this evaluation as an anonymous submission. This meant responses could not be matched to data for those that received equipment. Nevertheless, these two prior data perspectives provide an indication that beneficiaries were in a good position to take forwards learning in their own time and on their own devices.

6.7 Levels of Confidence After Bite Sized Training

For all *Bite Sized Training* respondents, they were all asked to respond to how confident they felt with technology after receiving the training, and this produced a very positive response. The following diagram summarises response within this area.

Figure 6.23 – Levels of Confidence After Completing *Bite Sized Training* (n = 26)

For 93% of beneficiaries, they responded with feeling quite confident or very confident after the training, which indicates that this approach can be very helpful in building confidence. This is particularly important for the most digitally excluded individuals, where education may be a distant memory or may bring back difficult memories of experience. This can be considered as characteristic of excluded groups within society, where lack of achievement within education has fed into difficulties for later life.

As such, these may represent relevant taster preludes that may then support individuals into longer forms of training should they feel as though it will be beneficial to them.

6.8 Bite-Sized Training Overall Skill Improvement

To consider how skills have improved in relation to this form of training, respondents were asked to rate their overall skill improvement from the training provided, and this provides the key framing for evaluation reporting. Data on individual skill improvement was also gathered, but due to the diversity of training provision and the limited data perspectives gathered, it was felt that these should not be covered at any length within the section provided here. However, to support partner reflection on what data has been gathered for specific skills, Appendix 6 provides specific skill breakdowns that may relate to training provision for partners.

The following diagram summarises responses to overall skill improvement for all beneficiaries within the *Bite Sized Training* dataset.
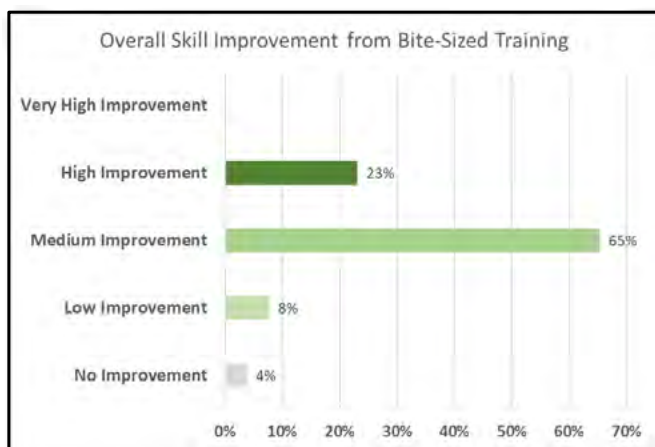
Figure 6.24 – Overall Skill Improvement After Completing *Bite Sized Training* (n = 26)

Here, most individuals (88%) have indicated that their skill ability has had a medium improvement or higher. 8% have indicated low improvement, and only 4% have indicated no improvement because of the training. The obvious difficulty with evaluating through one survey that asked for levels of improvement is that we have no baseline perspective on skill, which does make it harder to directly compare this to longer forms of training. However, a broad comparison between Longer Training and *Bite Sized Training* does indicate that higher levels of improvement can be more strongly evidenced from the longer training context. This should come as no surprise, given that more time is given to training and skills development. This was reflected in one open-ended comment from a *Bite Sized Training* participant:

> *"How can there be that much improvement with 2, 2 hours lessons…"*

Bite Sized Training Beneficiary

Finally, other open-ended text responses nicely illustrate how confidence building cannot be neatly separated from skills development, and we would suggest is a constituent part of any training development in this area. We would suggest that future approaches to evaluation will need to consider this and other types of connection that can be established between differing forms of data. This would need to be done within the frame of a constructive and open dialog within whatever partnership is established.

6.9 Training Summary

Although this evaluation section on training is a little more restricted than other areas, which can be linked to the limited amount of data we have been able to gather in this area, there are several important points that can be made here to inform further project work.

In essence, the longer training programme delivered by *Caudwell Children* focused on employability serves as a case study for future work, and the power that these forms of training can have on the lives of individuals. The programme itself has benefited from a specific targeting of an excluded group (in this case, 16–24-year-olds with disability), which has undoubtedly contributed to the successful running of the programme. The configuration of the programme around open dialog with participants also provides the necessary space for developing meaningful and active media literacies for employment (McDougall 2022), alongside skills development.

For disability groups, this is an important area to address. Although government reporting does indicate some positives in terms of disability in the workplace since pandemic difficulties have subsided (Gov.uk 2022), the complexities in

this area are still very much apparent. This can be very much related to the view that not enough is being done to break down barriers for these individuals (Disability Rights UK 2016), and that individual need to address barriers can be best served by local provision (Work and Pensions Committee 2021). We believe that the evaluation of the work conducted by *Caudwell Children* is an effective means of addressing these barriers through local provision.

Evaluation of this training programme in relation to employment has shown that skill change within this area is statistically significant, and the magnitude of change is greater than the levels seen with the supply of equipment. Additionally, software that can be connected to employment has enjoyed similar improvements to the employment digital activities considered. For *Get Connected* funding, this has not been the case, which emphasises the need for longer, focused interventions to address need. Success here can be related to the starting points of the beneficiaries and being able to take advantage of the opportunity. For the most digitally excluded in society, longer training interventions can be deemed as less suitable.

As such, the only feasible possibility for the project to engage excluded beneficiaries was via the *Bite Sized Training* that is also evaluated within this section. We would suggest here that these shorter forms of training are likely to be more appropriate as a starting point for many excluded groups who will struggle with sustained engagement for a variety of reasons. Although there is limited data available to us for this activity, this does show relevant gains in confidence and skills overall. This does need to be counterbalanced though with the limited benefit that a shorter intervention can make in terms of understanding. As such, we would suggest here that these shorter interventions have an important role to play in initial engagements and will start to bolster skills and media literacies in contextualised ways. These will allow for contact to be maintained with individuals and may then also act as a way of feeding beneficiaries onto longer training courses when they are ready to do so. For project work, it will undoubtedly require more time and resources at a local level, which were not available to project partners during delivery.

Overall, these elements of the project can be seen as being supportive for the development priorities within the region (Brown 2021) and are also addressing several barriers highlighted within the DCMS report (2021: 6). This includes providing greater access to educational opportunities and addressing issues associated to vulnerable groups, where appropriate space has been provided to contextualised media literacy development.

7. Conclusions & Recommendations

Given the evaluation conducted here and the difficult delivery circumstances outlined in the introductory section, there is little doubt that the project work conducted by the *Discover Digital* project has been successful, within the restricted parameters that this project work has operated in. Evidence shows that local provision is key in addressing the complex and intersecting needs of the digitally excluded, to help meet the defined priorities for the local area (Brown 2021).

Evidence in this report has indicated an appropriate targeting of excluded groups for *Get Connected Funding*, *Long Training*, and *Bite Sized Training*; and where evidence for skills change in beneficiaries is available, this has provided statistically significant results for beneficiaries, which is further evidenced by a consideration of the magnitude of change in these skill areas. This shows that broad development of digital competencies has taken place, and development has also occurred within contexts that are conducive for contextualised and active media literacy development (McDougall 2022). Many of the exclusionary barriers highlighted by the DCMS have been addressed through this project work (2021: 6), and the joined up working practices of the partnership can be seen as instrumental to this outcome.

This collaborative project work included the ability to flex to alternative provision when the need emerged, and for this project, this primarily centred around the difficulty with beneficiary engagement. Out of this difficulty, a successful physical presence was established within the Potteries Shopping Centre, which has turned this engagement situation around and fed into the success of *Get Connected Funding*. This is where most of the data lies for skills

development on the project, which shows that providing access to the digital world is a significant step in the journeys of excluded individuals. This provides opportunities for skills development on their own terms and developing understanding of own need.

Although the above does show significant change in skills, in some activity areas skill rankings can still be considered as sitting at low levels, and this is particularly apparent for software skills that enable and connect to certain forms of activity. As such, access and beneficiaries self-supporting themselves in development needs to be built upon in further project activity. These skill issues require additional time, space and resources to address, which needs to be taken into account for further project work.

Nevertheless, evidence exists that steps were taken in the right direction to help address these issues via the partnership. After realising that it would be difficult to recruit onto these longer training programmes, shorter forms of *Bite Sized Training* provided a more suitable framing for beneficiaries. For marginalised and excluded groups that are struggling with the cost-of-living crisis and other wider social factors, this represents a more consumable commitment where pressures on households are significant. The *Pop-Up Shop* helped to catalyse and develop this form of offering when partners were able to meet and work within the same location. For this form of training provision, only a limited dataset was available for evaluation, which can be related to the difficulties in obtaining data when training was delivered.

Finally, Caudwell Children's *Long Training* programme aimed at supporting disabled 16–24-year-olds was able to run, and data has been considered in this area. This provides the best evidence for skills development and active media learning in terms of how the programme was configured. The characteristics of involved beneficiaries meant they were in a better position to complete a longer training intervention than other excluded groups. Evidence exists here for a significant and well-rounded development for employment, that has also supported the development of software skills that connect to this area.

As such, a key area for development within future project work is finding ways to develop engagement from experiences such as the *Pop-Up Shop* and shorter, more informal training and support opportunities, into these more beneficial *Long Training* programmes. This is not easy to do, given that needs for this will develop over different time frames for beneficiaries, and the contexts that they come from will put different demands on this type of training provision.

To conclude this report, what follows here are several specific recommendations that can feed into future project

work of this nature. These recommendations relate to elements of project delivery and partners, possible future areas for project work, as well as the structural configurations that are needed for work in this area. These are all drawn from the evaluation detail that has been covered throughout this report.

7.1 Recommendations

⭐ **Establishing the *Pop-Up Shop* as a cornerstone to project work for the digitally excluded.**
Through the difficulties experienced on the project and the need to flex delivery to engage beneficiaries, the partnership established a successful presence within the Potteries Shopping Centre to meet the needs of beneficiaries. This allowed for engagement with groups that would not have been otherwise reached by the project, helped to establish alternative modes of provision, and drove applications to *Get Connected Funding*. The possibilities for this type of provision could be expanded, given the right project funding, time, and resources. This could include being a main contact point that beneficiaries can access, to continue support with the equipment they have received, as well as further training and support when its needed. Maintaining contact is important with beneficiaries, and this does provide a suitable mechanism for marginalised groups to be able to do this. Possibilities could be explored in terms of creating themed shop days for certain groups of individuals, which then could be advertised in local communities. This may further help engagement with individuals that feel less connected to the digital. All other elements of the project can then be promoted via the shop presence, which help to drive useful digital engagement within the region.

⭐ **Access to technology for the digitally excluded needs to come early.**
This represents another area that was prioritised well within the circumstances encountered and is an important starting point within cost-of-living crisis. Beneficiaries will not become involved with digital journeys if they do not have access to the right equipment, and if household finances are tight, it is impossible for individuals to fund expensive equipment themselves. Strong evidence exists that this provides a starting point for a digital skill development journey, that is supported by technology access within the home. Staying in contact with these individuals over time on their journeys will then give opportunities to provide more focused support via partners, whether this in the form of *Bite Sized Training*, or via *Long Training*

programmes that will have more benefit. Access provides an important first step for beneficiaries to understand need on their own terms over time, and it is likely that much of the earlier work will be shorter ad-hoc interventions that more suit the needs of individuals and the circumstances that they face.

⭐ **Create a mix of *Bite Sized* and *Long Training* provision to meet the needs of individuals, that connects well with their developing needs**
Although the practicalities of project work of this nature require training provision to be pre-configured, this does not guarantee that it will meet the needs of individuals. As such, approaches need to be established where a project team can develop training and support over time, when the needs of groups they are dealing with are fully understood. This is particularly pertinent within the national contexts we are experiencing, where needs are likely to change. Digital development is difficult and has many facets, and individuals are likely to need multiple inputs (short and long) to support the priorities for Stoke-on-Trent. It is in these moments that wider digital and media literacies are likely to be developed, in relation to more positive uses of digital technology.

⭐ **Signposting to wider support within the local area and beyond is needed.**
Earlier stages of support are also likely to involve effective signposting to other forms of services that can be accessed by beneficiaries. This may act as a prelude to further training support or may provide the only mechanism to support individuals if expertise does not exist within the partnership itself. The latter is very likely to happen, with the diverse range of needs that fall under the banner of digital exclusion. Arguments can be made for a signposting service that sits at a local level that can support project delivery. Additionally, how project work is configured in terms of outcomes should also find ways of recognising signposting work done by project partners to support beneficiaries. This does not necessarily sit neatly with evidence reporting, when it can be focused on what the partners provide themselves.

⭐ **Partners should spend time reflecting on skills development within this evaluation, to consider how project work could be configured in the future.**
A lot of the detailed evaluation work within this report has focused on skills development via the provision of equipment and training, which has allowed for the evaluation to explore the importance of skills and understandings. The report has started to indicate how

these skill areas can interlink and provide possible contextual relevancy to beneficiaries. These configurations could be greatly expanded on, and it is the partners themselves who best understand the beneficiaries that they have in front of them. Doing this type of work should then be supportive in terms of the previous point in these recommendations.

⭐ **More funding, time and resources are needed for project work such as this, to effectively address digital exclusion within the local area.**
As all the points so far are beginning to indicate (as well as further recommendations), this has implications for how projects of this nature are setup and funded. The partnership has done useful work within a short period of time, and some of the suggestions here would require more sustainable funding for local organisations that are best placed to deliver within communities. This will help to further configure the project beyond 'solutionism' (McDougall and Rega 2022) and will in turn create sustained and meaningful contextualised support for the realities that individuals face.

⭐ **Difficult commercial circumstances need to be addressed within equipment supply.**
The problems with funding suitable internet connectivity that is sustainable for beneficiaries has been highlighted, and this relates to the long commitment that broadband contracts require. Commercial support with the supply of technology equipment proved to be the only way that this could be done within the project, but the inclusion of subscription-based software packages that expire (standard practice for the technology retail sector), can act as a barrier to engagement when these cannot be renewed. This provides arguments that the supply of software may be better served within a project partnership, where free open-source alternatives can be installed on devices. However, workplace reliance on Microsoft products means that this cannot be easily circumvented for those wanting to enter digital forms of employment. This along with the problem of internet connectivity cannot be easily addressed within a project partnership, and wider structural support is needed. No assumption should be made regarding who deserves this support, as evidence indicates that it is not just the unemployed who are suffering within the cost-of-living crisis.

⭐ **Improve the granularity of evaluation data collection and find alternative ways to evaluate development of media literacy.**
Throughout the evaluation work, several areas have

been highlighted where data collection could be improved to further develop understanding on the project. The partnership needs to discuss and agree the importance of doing some of these things to improve how projects can react to the needs of groups. One example in this area relates to how data on disability has been collected in the main. This has focused on a simplistic form of evidence reporting where a simple yes or no response was required from beneficiaries on whether they had disability or not. Given the diversity of need that comes under the banner of disability, there needs to be further granularity to questioning here that is consistently used across the project to understand need and provide support. Media literacy forms a key area for evaluation improvement. The work conducted by *Keele University* has focused on the assessment of discrete skills, rather than the positive forms of active and critical media use that underpins this concept. We would suggest here that evaluation in this area needs active participation from project partners on the ground that have a key role in understanding and working with the complexities that beneficiaries face with technology use. This would then help to take evaluation beyond a consideration of siloed skills and would help to increase the effectiveness of project work.

⭐ **The project partnership should consider how work with certain groups can be further developed, based on presented evidence.**
As an end evaluation from the data that is available to us, needs within certain excluded groups have emerged that should be looked at for future project work. A relevant example in this area is how females have become involved with the project, given that this is a group that is underrepresented within the tech industry. Technology job roles tend to be male dominated, and females are more likely to enter modes of passive consumption, rather than developing technical production-based literacies. This was very much seen in the data, as although there is a good balance of females for *Get Connected* funding, males have tended to dominate training contexts from the data that we have available. Looking at these evaluative areas within the report should then be helpful for considering how this can be addressed in future work by the partnership. Another area that relates to this in the postcode analysis within the overall data perspectives. Certain districts have had a restricted beneficiary engagement, and if evidence does not exist elsewhere for engagement in these areas, then these should be considered for future project work.

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Appendix 1 – Evaluation Data Collected for Project Activities

Project Activity	Data Collection		
Pop-Up Shop	**Phase 1 (n = 94)** Partners running pop-up shop activities within the potteries shopping centre (support and signposting) asked attendees if they would be willing to provide demographic data and permissions for completing a subsequent evaluation survey of experiences. Initial data collected in this context: - name and contact information - employment status - benefit status - age, gender, ethnicity, and whether an individual considers themselves to have a disability	**Phase 2 (n = 20)** For those who provided data in phase 1 and permission for further evaluation contact, the following data was collected: - if student - university or college attended - if employed - details of job - whether actively seeking employment, regardless of current circumstance. - usefulness of pop-up shop experience (whether continued to use learning in daily life; Likert scale ranking of usefulness; whether they would have sought out same support elsewhere; and free text response in this area) - whether they have had opportunity to receive further training and support after pop-up shop, and if the opportunity was taken of the nature of the training / support. - whether they were made aware of Get Connected funding at the pop-up shop, and if they applied for this, information on whether their application was successful or not. FOR BENEFICIARIES WHO HAD NOT RECEIVED FUNDING: - access and use of technology (hours spent using technology each week, what hardware they have access to, confidence using technology – before and after their pop-up shop experience, and primary internet connection) - digital skill Likert ratings for common digital activities (categories of skills: employment; safety, health, and well-being; family and community; entertainment and shopping) - digital skill Likert ratings for common software applications (office applications, internet browsing, graphic design, videogaming, audio, photo, video editing, email, file sharing, coding and programming, operating systems, and social media) - an overall Likert skill rating for how far digital skills have improved because of the pop-up shop experience - free text response on digital needs and barriers to online participation - selection list of areas for future development in relation to digital technology		
Get Connected Funding	**Phase 1 (n = 172)** Partners and associated organisations invited individuals to make applications for Get	**Phase 2 (n = 154)** After approval of funding for an individual application data was supplied for inclusion within the evaluation dataset, individuals were then contacted to complete an initial evaluation survey.	**Phase 3 (n = 45)** Towards the end of the project, all individuals who had received funded equipment and had also completed the evaluation survey in phase 2 were

connected funding (laptop, software, and connectivity) or individuals found funding via project marketing and applied.

Data captured within application form included:

★ name and contact information
★ employment status
★ benefit status
★ whether UK citizen, and if not status within the UK
★ age, gender, ethnicity, and whether an individual considers themselves to have a disability
★ details of why the individual needs funding support and the benefit it will bring.
★ details of the equipment they need funding for
★ Referee contact information and statement of support

Note: If unsuccessful in funding application, data has not been used within the evaluation.

This first evaluation was focused on baselining technology use and skills before benefitting from funded equipment.

The following data was collected within this starting evaluation:

★ how they found out about Get Connected funding.
★ hours per week using digital technology
★ access to digital technology hardware, and whether they have access to the right equipment.
★ confidence Likert rating for using digital technology
★ primary way of connecting to the internet
★ digital skill Likert ratings for common digital activities (categories of skills: employment; safety, health, and well-being; family and community; entertainment and shopping)
★ digital skill Likert ratings for common software applications (office applications, internet browsing, graphic design, videogaming, audio, photo, video editing, email, file sharing, coding and programming, operating systems, and social media)
★ how a range of online applications (social media, audio, video, photo sharing, websites, collaborative authoring, blogging, meetings) are used by an individual (not used, viewing only, viewing and posting / contributing)
★ Likert rating on ability to find information using search engines
★ selection list of areas for future development in relation to digital technology
★ free text response on digital needs and barriers to online participation

then also invited to complete an end evaluation survey. This survey was primarily designed to capture data on how their skills with using technology had changed.

The following data was collected within this final evaluation:

★ Whether an individual had been actively seeking employment, regardless of circumstances.
★ Whether they had the opportunity to receive further training / support since the last survey
★ confidence Likert rating for using digital technology
★ whether they believed that they now had access to the right equipment via funding and what was now their primary internet connection.
★ digital skill Likert ratings for common digital activities (categories of skills: employment; safety, health, and well-being; family and community; entertainment and shopping)
★ digital skill Likert ratings for common software applications (office applications, internet browsing, graphic design, videogaming, audio, photo, video editing, email, file sharing, coding and programming, operating systems, and social media)
★ free text response on how equipment funding has helped to address needs.
★ free text response on how funding has helped individual feel more included in digital life.

Long Training	Phase 1 (n = 12)	Phase 2 (n = 12)

	Individuals participating in a longer training programme (more than a day) were asked by the training provider to complete an evaluation survey when starting the intervention. This first evaluation was focused on baselining technology use and skills before benefitting from the training. The following data was collected within this starting evaluation: ★ name and contact information ★ age, gender, ethnicity, and whether an individual considers themselves to have a disability ★ whether UK citizen, and if not status within the UK ★ employment status ★ benefit status ★ hours per week using digital technology ★ access to digital technology hardware, and whether they have access to the right equipment. ★ confidence Likert rating for using digital technology ★ primary way of connecting to the internet ★ digital skill Likert ratings for common digital activities (categories of skills: employment; safety; health, and well-being; family and community; entertainment and shopping) ★ digital skill Likert ratings for common software applications (office applications, internet browsing, graphic design, videogaming, audio, photo, video editing, email, file sharing, coding and programming, operating systems, and social media) ★ how a range of online applications (social media, audio, video, photo sharing, websites, collaborative authoring, blogging, meetings) are used by an individual (not used, viewing only, viewing and posting / contributing) ★ Likert rating on ability to find information using search engines ★ selection list of areas for future development in relation to digital technology ★ free text response on digital needs and barriers to online participation ★ free text response on how the training could help the individual feel more included within digital life.	For individuals who have completed the first evaluation and have got to the end of training, they were asked to complete a final evaluation by their training provider. This survey was primarily designed to capture data on how their skills with using technology had changed. The following data was collected within this final evaluation: ★ confidence Likert rating for using digital technology ★ digital skill Likert ratings for common digital activities (categories of skills: employment; safety, health, and well-being; family and community; entertainment and shopping) ★ digital skill Likert ratings for common software applications (office applications, internet browsing, graphic design, videogaming, audio, photo, video editing, email, file sharing, coding and programming, operating systems, and social media) ★ free text response on how training has helped to address needs. ★ free text response on how training has helped individual feel more included in digital life.
Bite Sized Training	Phase 1 (n = 26) With shorter, bite sized training for less than a day, it was not feasible to conduct two longer evaluation surveys to evaluate change for individuals receiving this form of training. Consequently, a shorter one-off evaluation survey was created for use at the end of the training. Completion was supported by the training provider. The following data was collected within this evaluation:	

- ✩ age, gender, ethnicity, and whether an individual considers themselves to have a disability
- ✩ whether UK citizen, and if not status within the UK
- ✩ employment status
- ✩ benefit status
- ✩ hours per week using digital technology
- ✩ access to digital technology hardware, and whether they have access to the right equipment.
- ✩ Likert rating scale on how far their confidence with technology improved after the training
- ✩ digital skill Likert ratings on improvement for common digital activities as a result of the intervention (categories of skills: employment; safety, health, and well-being; family and community; entertainment and shopping)
- ✩ digital skill Likert ratings on improvement for common software applications as a result of the intervention (office applications, internet browsing, graphic design, videogaming, audio, photo, video editing, email, file sharing, coding and programming, operating systems, and social media)
- ✩ overall improvement in all digital skills Likert rating
- ✩ free text response on how training has helped to address needs.
- ✩ free text response on how training has helped individual feel more included in digital life.

Appendix 2 – Overall Digital Activity Skill Improvement Data for *Pop-Up Shop, Get Connected Funding, Long Training and Bite Sized Training*

Digital Activity	No Improvement (%)	Low Improvement (%)	Medium Improvement (%)	High Improvement (%)	Very High Improvement (%)	n
Finding a job or doing work	26%	23%	32%	19%	0%	62
Education and training to develop your career	25%	32%	32%	9%	2%	71
Addressing loneliness and isolation	35%	22%	27%	14%	2%	81
Engaging with your community	30%	27%	30%	11%	2%	81
Accessing services online in general	32%	33%	24%	10%	1%	88
Accessing social services and benefits	31%	33%	24%	9%	3%	72
Managing your finances online	37%	28%	21%	11%	3%	78
Shopping and finding the best deals online	33%	28%	30%	8%	1%	81
Staying safe online	27%	30%	28%	13%	2%	87
Supporting your family / friends to stay safe online	25%	30%	27%	15%	3%	67
Supporting family life in general	26%	32%	30%	9%	3%	80
Supporting your own well-being	24%	42%	25%	7%	2%	85
Supporting your own mental health	27%	34%	27%	10%	2%	85
Supporting your own physical health	22%	43%	22%	10%	3%	81
Going online for entertainment and personal interests	39%	28%	23%	8%	2%	84

Appendix 3 – Overall Software Application Skill Improvement Data for *Pop-Up Shop, Get Connected Funding, Long Training and Bite Sized Training*

Digital Activity	No Improvement (%)	Low Improvement (%)	Medium Improvement (%)	High Improvement (%)	Very High Improvement (%)	n
Office Applications	35%	33%	27%	4%	1%	75
Internet Browser Software	31%	39%	19%	10%	1%	80
Graphic Design Software	42%	32%	23%	3%	0%	65
Videogames	49%	31%	13%	4%	3%	68
Audio Software	32%	40%	22%	4%	2%	72
Photo Software	35%	42%	16%	7%	0%	76
Video Editing Software	38%	31%	25%	6%	0%	68
Email	22%	40%	30%	4%	4%	84
Software to share files with others	30%	32%	29%	8%	1%	74
Coding Software	51%	21%	21%	7%	0%	57
Using Operating Systems	41%	26%	20%	9%	4%	74

Appendix 4 – Funding *Sign Test* Results

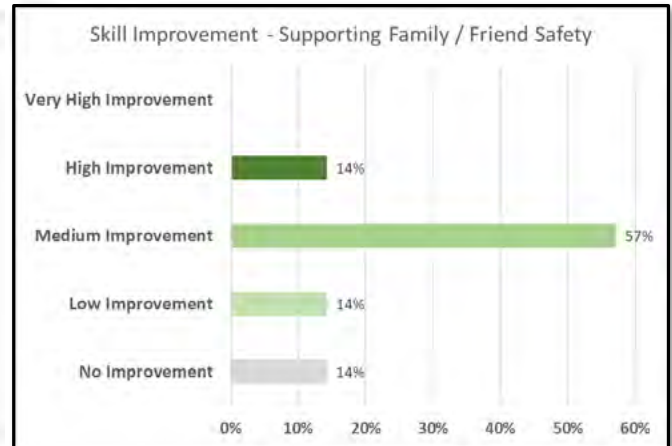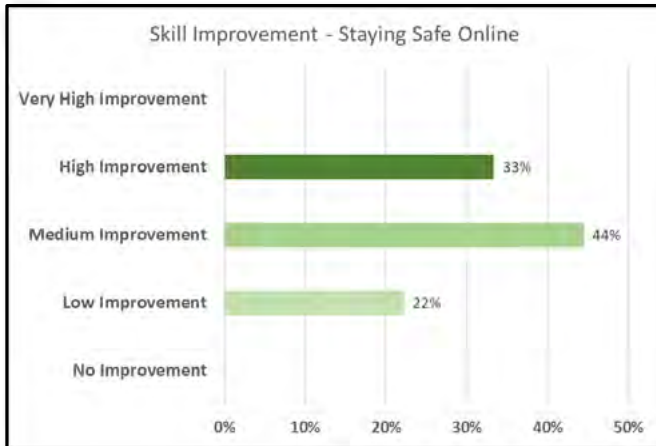| Activity Skill / Software Application Skill	Diff (-)	Diff (+)	Ties	Total	p value
Digital Activities					
Finding a job or doing work	3	11	11	25	0.057
Education and training to develop your career	3	21	12	36	< 0.001
Addressing loneliness and isolation	3	21	17	41	< 0.001
Engaging with your community	4	25	14	43	< 0.001
Accessing services online in general	1	24	20	45	< 0.001
Accessing social services and benefits	3	20	15	38	< 0.001
Managing your finances online	4	18	18	40	0.004
Shopping and finding the best deals online	4	19	18	41	0.003
Staying safe online	3	29	12	44	< 0.001
Supporting your family / friends to stay safe online	6	23	8	37	0.002
Supporting family life in general	5	24	13	42	0.001
Supporting your own well-being	3	29	12	44	< 0.001
Supporting your own mental health	5	28	11	44	< 0.001
Supporting your own physical health	4	30	8	42	< 0.001
Going online for entertainment and personal interests	3	24	17	44	< 0.001
Software Applications					
Office Applications	3	20	17	40	< 0.001
Internet Browser Software	5	23	11	39	0.001
Graphic Design Software	3	14	19	36	0.013
Videogames	4	18	15	37	0.004
Audio Software	4	24	13	41	< 0.001
Photo Software	2	24	18	44	< 0.001
Video Editing Software	2	18	18	38	< 0.001
Email	6	29	9	44	< 0.001
Software to share files with others	3	24	14	41	< 0.001
Coding Software	2	12	19	33	0.013
Using Operating Systems	6	19	13	38	0.005

Appendix 5 *Caudwell Long Training* Selected *Sign Test* Results

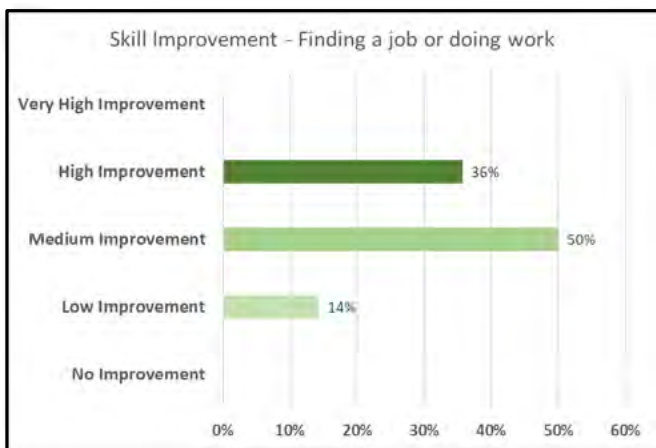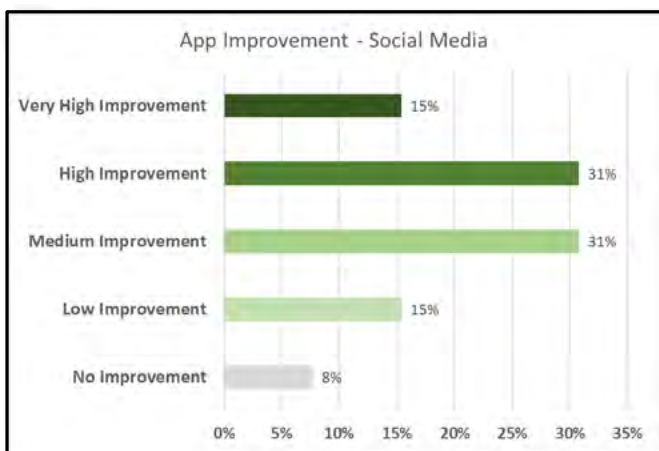| Activity Skill / Software Application Skill	Diff (-)	Diff (+)	Ties	Total	p value
Digital Activities					
Finding a job or doing work	0	12	0	12	< 0.001
Education and training to develop your career	0	9	3	12	0.004
Addressing loneliness and isolation	2	7	2	11	0.18
Staying safe online	1	7	4	12	0.07
Supporting your own well-being	1	8	3	12	0.039
Supporting your own mental health	2	7	3	12	0.18
Supporting your own physical health	1	8	3	12	0.039
Software Applications					
Office Applications	0	7	5	12	0.016
Email	0	9	3	12	0.004
Software to share files with others	0	11	1	12	0.001

Appendix 6 – *Bite Sized Training,* Reported Skill Improvement for Training Providers

Stoke College –Skill Improvement Ratings Related to Employability

Skill Improvement - Staying Safe Online

Very High Improvement	
High Improvement	33%
Medium Improvement	44%
Low Improvement	22%
No Improvement	

Skill Improvement - Supporting Family / Friend Safety

Very High Improvement	
High Improvement	14%
Medium Improvement	57%
Low Improvement	14%
No Improvement	14%

Caudwell Children – Skill Improvement Ratings Related to Employment (Social Media)

Skill Improvement - Finding a job or doing work

Very High Improvement	
High Improvement	36%
Medium Improvement	50%
Low Improvement	14%
No Improvement	

Skill Improvement - Education to develop career

Very High Improvement	8%
High Improvement	23%
Medium Improvement	69%
Low Improvement	
No Improvement	

Skill Improvement - Online Employability Skills

Very High Improvement	8%
High Improvement	15%
Medium Improvement	62%
Low Improvement	15%
No Improvement	0%

App Improvement - Office Applications

Very High Improvement	
High Improvement	
Medium Improvement	64%
Low Improvement	27%
No Improvement	9%

App Improvement - Email

Very High Improvement	8%
High Improvement	
Medium Improvement	62%
Low Improvement	23%
No Improvement	8%

0% 10% 20% 30% 40% 50% 60% 70%

App Improvement - Software to Share Files

Very High Improvement	
High Improvement	18%
Medium Improvement	36%
Low Improvement	27%
No Improvement	18%

0% 5% 10% 15% 20% 25% 30% 35% 40%

App Improvement - Social Media

Very High Improvement	15%
High Improvement	31%
Medium Improvement	31%
Low Improvement	15%
No Improvement	8%

0% 5% 10% 15% 20% 25% 30% 35%

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