

Learning Example – Technology and AI – Derby City Council

Introduction

This learning example shows how Derby have developed their Short Breaks provision in their first year of funding from the Department for Education's Short Breaks Innovation Fund. Derby became involved during the second year of the Innovation Fund, following a successful bid in line with their updated Short Breaks Statement.

The new Derby Short Breaks Service commenced in April 2023, following a process of both recommissioning of existing services and commissioning new provisions. Derby embeds co-production at the centre of all the work they do around special education needs and disabilities (SEND), and this is clear in how they have approached the design and delivery of their Short Breaks provision.

Derby is particularly focusing on offering a service to families who are not receiving any similar support. This example highlights a theme of Derby's innovative practice in implementing technology to transform their short breaks offer.

Aims and Objectives

Following from the successful bid, Derby aimed to use the opportunity to harness developments in technology and artificial intelligence (AI) within their short breaks offer to better support disabled children and young people and children and young people with SEN, and children and young people with social, emotional, and mental health (SEMH) needs. This approach aimed to bring short breaks provision in line with current modes of interaction among young people today who often use online games and apps.

The technological aspect of the short breaks offer aimed to particularly increase engagement and overcome issues with children and young people with SEMH needs not having their needs met in school settings as well as providing a support net for those on the lower end of part time school hours.

Derby aimed to shake up the provider market by identifying the drivers and needs of families seeking short breaks and challenging providers to address the gaps in provision by thinking innovatively on the way they run their services.

In doing so, Derby aims to take a community wide approach which ensures that young people and families using the short break services feel part of the local community and there is an available network of support on offer.

This learning example will look at how Derby's Short Break Offer aims to:

- Incorporate technology as part of the innovative approach to short breaks provision.
- Address the issue of long waiting list to lessen times for families that need support and have minimal access to community services.
- Embed short break services into the community to enhance social networks of support and a sense of belonging.

Approach

Derby has focused on thinking about how they can challenge their current way of designing and providing short breaks. They wanted to utilise this opportunity to encourage their providers and wider network to consider the ways in which they could change and transform the services they provide. One way they achieved this was by encouraging providers to focus on developing their theory of change – particularly around what outcomes are they seeking for those that use their service and how these can have both a short-term impact and a longer-term goal.

Linked to this central idea of transformation, the primary way in which Derby have embedded innovation into their short breaks service is through the use of technology and AI. This learning example will be exploring this particular theme in detail, to look at how it has been utilised as a way to amplify children and young people voices and provide immersive interactive experiences.

Technology and AI

Derby's use of technology and AI has been focused on two main outputs – using an app called *Includmi* and opening a gaming and tech learning hub called *Imbue*.

Includmi

Derby is one of only a handful of local authorities to trial using the new app [Includmi](#) as part of their short breaks framework. Includmi is a health and wellbeing mobile app designed to allow disabled children and young people and children and young people with SEN to share their thoughts and feelings and check in with family members, trusted key workers and support teams.

This app was conceptualised prior to Derby's involvement in the Innovation Fund, by David Paice. Since its inception, Derby have been involved in the early beta stages of its development as the app seeks to learn what effective local support looks like for disabled children and young people and children and young people with SEN. This app aims to

embrace social media functionalities to place the needs of a child or young person at the centre of their own care, education and health.

It has a wide variety of features, including research-based self-help activities for children and provides an opportunity to log the areas where they would like support. This information is then shared with chosen members of their support network, such as teachers or family members. This advancement in technology has opened up a new means of communication, particularly for those children with complex needs such as being non-verbal.

Derby is passionate to explore the advantages of technology and AI development for SEND services and provisions and is considering how this app can be used more widely in education and health settings. Derby is planning to pull data from the app to help them assess whether a young person's social emotional mental health has improved. Due to it still being in the beta stage, there is not yet sufficient data available to pull off robust conclusions, but Derby has commented on how families have already seen initial improvements in communication they have had with their child.

In Derby, Includmi has been instrumental to their Short Breaks Innovation Programme and has enabled them to place the young person's voice at the centre of the support services they offer. It also provides crucial insights in the real-time impacts these services are having on children and young people and their families. It has enabled Derby to gain a better understanding of the needs of those using their short breaks services and ensure young people have a platform to voice their feelings.

Imbue

Derby's newest provision as part of their Short Breaks Innovation Programme is an immersive technology hub called [Imbue](#). Located in the city centre, this is a gaming and tech learning centre for disabled children and young people and children and young people with SEN, SEMH needs or are struggling to engage with mainstream education aged between 8 and 18. The hub is currently the only one of its kind in the country and the council worked with Imbue to open the centre specifically following [their successful Short Breaks Innovation Fund bid](#).

Innovation is right at the heart of design of the Imbue hub, utilising and embracing cutting-edge developments in immersive technology to provide a range of exciting and engaging activities for disabled children and young people and children and young people with SEN. This hub is particularly aimed at children and young people that struggle to leave the house and/or spend a lot of time gaming online alone.

Imbue is designed with the following five themes in mind:

- **Physical Imbue** - using immersive technology provides an experience that physically immerses users in the digital environment.

- **Active Imbue** - using an immersive and innovating approach to health and fitness.
- **Educational Imbue** – developing an interactive learning experience by using innovative teaching methods.
- **Life Imbue** – developing life skills through combining real-world experiences with digital technology.
- **Immersive Imbue** – providing digital gaming services to enable young people to game in a safe and secure environment.

Additionally, this hub has furthered its innovative thinking by providing qualification opportunities to children and young people on topics such as coding, electronics and media. Skills in this area are rising in demand and by equipping these young people with qualifications of this kind, Imbue is demonstrating how to best prepare for transition from short breaks into further education or employment.

The aim of this innovative work is to consider how technology and AI can be best used within the setting of short breaks and wider SEND support, creating inclusive and immersive environments that enable young people to connect digitally and develop their technical skills.

Challenges and Successes

Key Challenges

- Derby identified the initial set-up period for developing the app limited the ability to isolate data and capture impact for reporting. The delays in capturing data early on minimises the ability to monitor outcomes based on the short breaks provision.
- Encouraging providers to move away from conventional practices of service delivery but to think innovatively about designing and delivering activities in order to contextually address the needs of children, young people, and their families.
- Improving communication to parent carers on the range of provisions available in the system that they could potentially access especially information provided through the Local Offer.

Key Successes

- **Harnessing the use of AI and technology in SEND settings and services:** Through the recognition of activity trends among children and young people, Derby aims to bring provision in line with current technological advancements.
- **Creating new avenues for children and young people to access services:** By lowering thresholds and reducing waiting lists by triangulating current waiting lists across in the

system, Derby was able to circumvent duplicating waiting list but found novel ways of identifying need and rerouting children and young people into the short breaks offer.

- **Amplification of children and young people's voices and experiences:** Using the Includmi app to capture the real-time impact of the services on children and young people and their families especially from those who are routinely excluded from capturing their voices.

Key Learning

Derby has carefully thought about the design, delivery and monitoring of their new Short Breaks offer by incorporating technology and encouraging systems change with providers.

- **Open to incorporating technology:** By recognising the importance of being open to utilising developments in AI and technology in line with the interests of disabled children and young people and children and young people with SEN and SEMH needs.
- **Embedding short breaks in the community:** Recognising that short break provisions cannot exist in silos but by taking a community-wide approach, Derby offered an opportunity to think about how short breaks can be offered within the community to foster a sense of belonging and strengthen links to schools and establish support networks.
- **Encouraging innovation among providers:** Showcasing the importance of developing a clear theory of change that adopts an outcomes-led approach within the service design and delivery which ensures positive outcomes for young people and their families.