

WP3: Family Learning – Wider Outcomes

Case Study: DigiDabble

North Ayrshire Council, Scotland: Family learning for digital skills



Dabbling at Ardrossan Library

Background

North Ayrshire Council have developed an irresistible digital offer, where popup all-day Saturday events in libraries provide a safe and supported environment for families to explore new technologies and adults, children and young people can improve their digital skills.

Public demand for innovation from its library service was evidenced through falling visitor number on Saturdays and public consultation meetings in late 2015. The council knew they had to offer something globally innovative and took inspiration from library MakerSpaces and coding clubs in Australia, USA and New Zealand. Uniquely, North Ayrshire wanted to offer an informal, unstructured fun day with digital 'toys' for families to play and learn together. Demand is carefully managed and the team has brought partners on board to increase capacity. These events are still very much a targeted intervention in council plans to increase equity and digital participation

Essentially these events are aimed at the poorest families and are rooted in developing family learning through spending time together playing, having fun and building family relationship through shared experiences. The libraries are carefully selected and are prioritised as identified in North Ayrshire's Council Areas of Family Resilience data.

Increasing digital skills and digital participation through library events co-located with Employability Hubs is especially positive. North Ayrshire's economic challenges are well documented and growing interest in digital skills as well as STEM subjects will contribute to developing employability and career aspiration, especially for girls, among local families. Developing these skills locally builds workforce capacity and creates a more attractive location for digital businesses.



Kilbirnie's Library and Employability Hub dabblers

“The events bring a new audience to libraries with more lads, dads and teenagers, as well as DigiDabble ‘groupies’ who follow the events around as we pop up in different local libraries. We are responding to requests for sessions in schools and our library holiday club activities in areas where there is demand for wider digital participation and financial hardship. “

[DigiDabble](#) is demand-led and offers local families access to technology that is widely available in more affluent homes and city centre locations. It is designed to increase equity for families who might never hold an iPad otherwise. Recognised by an Edge Digital Library Award, the programme provides a communal toolbox made up of software, digital tools, 3D printer, robotic kits, gaming, virtual reality and coding. Families have fully embraced DigiDabble, following events around local libraries, attracted by the chance to try something new and by the opportunity to build skills and confidence.

Programme development

Library and adult learning staff collaborated to develop the programme, which aims to support critical thinking. After lengthy research the Library Team identified fantastic digital tools which include:

- Osmos: developing the iPad to coding, literacy, numeracy and drawing – fun-based collaborative learning in a range of games and programmes
- Makey Makeys: an invention kit using basic conductive science – it really is playing SuperTrouper on the carrots, gummi bears or cups of water
- Minecraft storymakers: collaboration, storyboarding, digital skills and project management feature in this animation application
- Use of robotic droids Sphero BB-8 app enabled droid and SPRK+ programming robot: These help with planning, programming, digital and communication skills
- 3D printer: develops creative and digital skills
- Pre-school early coding activities using Cody the Mouse and Fisher-Price Code-a-Pillar.
- Tiggly words, shapes and maths using the iPad to teach literacy and numeracy to younger children;
- Marbiotic Smart Letters and Magik Play which combines different learning challenges for the iPad with the simplicity of traditional toys; and

- Quiver app which allows children to bring their colouring to life using 3D augmented reality.

The first sessions were all about the staff trying out their new skills and identifying whether they could satisfy public demand for digital skills support. Within a couple of sessions the Dabblerteam secured the support of partners such as the Youth Services Team and a volunteer group of gamers to help enhance the range of digital participation opportunities. That increased the team and broadened the range of skills supporting events. The gamers brought a vibrant enthusiasm and a knowledge and skills library staff don't have. The Youth Team brought Mario Kart and Virtual Reality headsets, which have been a real hit. The Scottish Government recently gifted a 3D Printer and training programme for each library, so these events are a great opportunity to promote the new service. The Council has also added an animation specialist to help with the digital storymaking kits. The YouTube video [How DigiDabble is Making a Difference in North Ayrshire](#) tells the story.



The littlest Dabblers at Kilwinning Library

Improvements Achieved and Challenges Overcome

Staff skills have been a concern but the objective is not to teach digital skills or be 'experts' but to provide the technology and be a support as families explore together. The library staff are learning new skills and have enjoyed it so much that there's been a clamour about who should have the next DigiDabble Day. The senior Information and Culture staff team devoted part of their quarterly meetings to learn from Dabblerteam what the tools could teach and do to broaden their understanding.

The drop-in programme is in its early stages so there has not been a formal evaluation of the impact. This early intervention measure is stimulating attainment and achievement, with the following outcomes:

- 100% of respondents said that taking part in the project had benefitted them and their children.
- Digital participation increased among younger children;
- Increase in library visits;



- Increase in library opening hours;
- Younger learners are better equipped to meet the capacities of [Curriculum for Excellence](#);
- Levels of literacy and ICT literacy among participants have improved.

Sessions are run on a drop-in basis and each session has grown attracting a larger audience on each occasion. Over 1000 people have been reached in just 5 events. Many parents attend because they know their children are going to be coding at school and they don't know much about it and want to be able to support their children better.

The videos have a background noise of gleeful laughter as participants find out the amazing things they can do. Feedback is always positive and the growth in confidence and competence by children and adults is inspiring. The most remarkable aspects are participant empowerment and the shared learning experience which brings parents/carers and children closer together.

Comments from participants have included:

'It's amazing what you can do in the library these days. It's Phenomenal'

'My 4 and 5 year olds loved the Tiggly games, the Magik Play and Toca Band. It's a great way to find and try good apps. Thank you!'

'Excellent event! Learned about 3D printer, tried animation and a carrot piano! Very worthwhile morning. Thank you'

'We thought this was a great event. Really, really, really cool. Loved the dancing robot, the 3D printer, VR headset, Osmo and Mario Kart. Here for over three hours and really enjoyed it. Would definitely come back if on again. Dad really enjoyed it too'

'Great to get to try out all your new tech. Kids loved it. Thanks all'

'My kids loved learning about the 3D printer and were even given a 3D item to take home, thanks'



Dad ready to advise at Kilbirnie

A couple of normally challenging teenagers came back twice during the day, bringing first a couple of other boys and then a group of girls to try out the digital tools and to play with the competitive games. The coding skills of some of the younger boys – 7/8 year olds – astounded their Dads and they stayed most of the day. An older man was particularly keen to see the 3D printer and travelled a considerable distance to see it in action, and he was thrilled to go home with his printed @ sign!

Outcomes and Future Targets & Goals

Library staff have responded to the evidence that traditional library opening hours on Saturdays were unsuccessful at attracting families. They have actively sought a development route for extending opening through pop-up digital events in different libraries and these have attracted large and enthusiastic audiences. Our goal is to continue to develop these and have an attractive family learning offer of monthly digital participation events in libraries.

DigiDabble recently won the 2017 Edge Digital Library Award. The judge was the Scottish Local Government's Chief Digital Officer Martyn Wallace who said that *"North Ayrshire Council's DigiDabble stood out as it felt like an amalgamation of all the different ideas and innovation but in a package to have specific "digital days" to enthuse, excite, inform and help locals not only through Digital inclusion but also social inclusion.*

I felt this was something that all libraries in the UK if not the world could lift and shift as a model for innovation or rollout to hackathon events etc to really engage all aspects of the community.

North Ayrshire to me felt like they pulled everything together in a simple package.

Ideally all libraries should look to be branded Digital hubs in the community, helping tackle gaps in digital skills but also helping foster new ideas and ways of working with communities too."

DigiDabble recently featured at the #notwithoutme event held by the BBC, Scottish Government and Carnegie UK, an event to encourage digital inclusion for young people.

Since then approaches have been made by Digital Communities Wales and services in England and North Ireland. It will also feature in two UK library conferences in 2017 because of the uniqueness of its practice.

As a result of the success of DigiDabble a funding application was made to Ayrshire LEADER, a European fund which supports rural communities and £180,000 was awarded in November 2016 for a three year programme for MakerSpaces in Rural Communities. This will bring a permanent collection of digital tools and staff support to our more isolated communities. Public support and great feedback was key to this success.



There is growing demand from schools for DigiDabble and a proposal has been developed for the Scottish Government [Pupil Equity Fund](#), for Head Teachers to help invest in programmes to close the attainment gap for those pupils receiving free school meals and clothing grants.

This will fund twilight training sessions for staff and volunteers to run events in schools and they can either invest in the equipment or borrow the core collection.

There is also potential to use the Osmos with an entirely different audience and to explore with our Health and Social Care Partnership how using simple literacy and numeracy software could stimulate mental agility and provide a mitigation against the progress of dementia.