

## Impact case study (REF3)

<b>Institution:</b> University of Aberdeen		
<b>Unit of Assessment:</b> UoA21 (Sociology)		
<b>Title of case study:</b> Creating rural resilience through cultural heritage		
<b>Period when the underpinning research was undertaken:</b> 2009-2020		
<b>Details of staff conducting the underpinning research from the submitting unit:</b>		
<b>Name(s):</b>	<b>Role(s) (e.g. job title):</b>	<b>Period(s) employed by submitting HEI:</b>
Claire Wallace	Professor (Sociology)	2005- current
Godred Fairhurst	Professor (Engineering)	1988-current
Chris Mellish	Professor (Computing Science)	2003-current
John Farrington	Professor (Geography)	1969-current
David Beel	Postdoc (Anthropology)	2011-2015
Leanne Townsend	Post doc (Computing Science)	2011-2018
Hai Nguyen	Post doc (Computing Science)	2013-2015
Gemma Webster	Post doc (Computing Science)	2013-2017
<b>Period when the claimed impact occurred:</b> 2013-2019		
<b>Is this case study continued from a case study submitted in 2014?</b> N		
<b>1. Summary of the impact</b> (indicative maximum 100 words)		
<p>The resilience of rural communities rests upon economic, social and cultural foundations. Research led by the University of Aberdeen has explored how rural communities in Scotland could most effectively co-create and interact with digitisation and provided guidance to policymakers on its implementation. Their work has informed the development of a digital archive platform, which has been accessed across the globe, creating a shared resource to access local history. The research has supported and strengthening collective decision-making at a local community level and more broadly, informed digital policy in Scotland and in Westminster, thus enhancing broader knowledge and understanding of rural histories and their role in community resilience.</p>		
<b>2. Underpinning research</b> (indicative maximum 500 words)		
<p>The capacity of a rural region to adapt to changing external circumstances whilst maintaining a satisfactory standard of living, known as 'rural resilience' can be challenged by declining and aging populations and is often compounded by poor digital infrastructure. Whilst cultural heritage has been of particular importance for remote and rural communities, traditional methods of cultural curation – such as paper archives and museums – are often run by local volunteers, with limited capacity and geographical scope. This is especially true in rural areas, which are sparsely populated and difficult for visitors to access. Digital archives offer the opportunity for much greater geographical impact and ease of access but rely on the digital skills and know-how both for the organisations setting up the archives and the people accessing them. Their success also depends upon these remote areas being digitally connected via reliable broadband [1]. Multi-disciplinary research led by the University of Aberdeen (2009-current) has focussed on how rural communities can adapt to the challenges associated with a lack of digital infrastructure and sought to present workable solutions. This work has been carried out across three main strands:</p> <p><b>Strand One:</b> The dot.rural Digital Hub (<a href="http://www.dotrural.ac.uk/">http://www.dotrural.ac.uk/</a>) at the University of Aberdeen (EPSRC; approximately GBP11,000,000) [P1] was the first initiative of its kind in the UK to focus on the rural digital economy and was driven with expertise from Professors John Farrington and Claire Wallace. Wallace, Chair in Sociology, and her team (Townsend, Ngyen and Webster) looked at various aspects of rural resilience and how it could be strengthened [1, 2]. The team initially</p>		

explored the effect of the urban-rural digital divide and role of Information and Communications Technology on participation in digital society, and found that rural areas were significantly disadvantaged, compounding the problems of aging and declining populations and leading to problems of social and economic sustainability. The team considered how rural areas could tackle these challenges through broadband initiatives building on local social capital [3] and developing creative enterprises.

Drawing upon Wallace's long-term interests in developing the quality of society, the research highlighted key factors for success in community broadband initiatives, using the UK government's strategy to extend 'superfast' broadband connections to 95% of premises by 2017 as a lens to clarify the issues associated with this ambition. Factors included 'technological capital' (local initiatives with broadband-linked organisations) and social capital (residents showing willingness to commit to building their community) for building rural resilience [3]. 'Cybermoor', one of over 20 collaborative partners within the dot.rural project is one such example of a community taking initiative. Cybermoor is a pioneering social enterprise involved with delivering fibre optic connections to rural areas in Cumbria [3]. In 2013, Professor Farrington collaborated with the Oxford Internet Institute (University of Oxford) team to conduct focused research on the rural digital economy and to present findings to Scottish Government and other stakeholders. This research led to the design of the 2013 Oxford Internet Survey, which comprised an expanded rural sample, enabling a close examination of access to the internet services in rural areas, its influence on social and economic development and of the rise of community enterprises facilitating 'DIY' broadband infrastructure. The OxIS 2013 survey, launched in Westminster London was the first to describe the variability in access to services between urban and rural areas, as well as between different nations and regions of the UK [4].

#### **Strand Two:**

Under the label 'Cultural Repositories & Information Systems', or 'CURIOS' (part of the dot.rural programme), [5] Wallace's team (Webster, Ngyen, Beel) together with its developer, Professor Chris Mellish (computer scientist) considered the role of digital archives in supporting interest in local heritage, and its contribution to community regeneration and strengthened community cohesion [5]. This research focused on rural Scotland to build an understanding of the way resilience develops within community, how culture can act as a catalyst in small communities, and the range of factors that foster resilience through offline and online community networks. This strand of the dot.rural programme found that the density and nature of civil society organisations, including local history associations, played a key role both in addressing the rural digital divide and in the resilience of that community [3-6].

This project brought Wallace and her team's sociology expertise together with geographers (Beel), historical archivists (Dr Kate Byrne, University of Edinburgh), computer scientists (Mellish) and residents of communities of the Outer Hebrides involved in the co-creation of a digital archiving resource. This resource, called 'Hebridean Connections', is an archive which includes materials from 13 Historical Associations founded in the villages across the Islands, using pioneering semantic web software to connect information about local people, crofts and fishing boats with wider available resources both nationally and internationally. As part of the project, Beel and Wallace worked closely with the *Comainn Eachdraidh* (CE), a grassroots movement in the Outer Hebrides established to collect a variety of materials, including audio recordings of local stories (in Gaelic), images, objects and artefacts. Wallace's research team was key to identifying how the digitisation of local cultural heritage could act as a stimulus towards social cohesion and resilience, through community participation, volunteering and the different kinds of social connections that develop from cultural heritage activities. By being online, these communities were also able to connect with the wider public, particularly diasporic communities and those interested in Scottish heritage throughout the world [5, 6].

#### **Strand Three:**

Wallace and Beel looked more closely at how mobilising communities for cultural heritage could lead to both social and economic value for rural areas. This was enabled by 'EViDAnCE: Exploring Value in Digital Archives and the Comainn Eachdraidh' project, an initiative funded by the AHRC as part of their Cultural Value Project. The researchers used ethnographic methods, including

participant observation workshops and semi-structured interviews, to understand the needs of local volunteers working across the Outer Hebrides in the use of online digital archives in order to expand their training and to engage these communities in participatory workshops that reflected on the cultural value of gathering and curating cultural heritage. Wallace and her team found that these activities brought not just cultural value to the communities into question but also social value through enhancing social capital. This methodology has been applied to rural communities in other parts of Scotland, such as Portsoy on the Moray coast, and elsewhere [6-8].

### 3. References to the research (indicative maximum of six references)

The quality of the underpinning research is confirmed to be of at least 2\* as evidenced by the volume of associated peer-reviewed, highly competitive research council funding.

#### References:

- [1] **Townsend, L., Wallace, C., & Fairhurst, G** (2015) 'Stuck Out Here': The Critical Role of Broadband for Remote Rural Places, *Scottish Geographical Journal*, 131:3-4, 171-180, DOI: <https://doi.org/10.1080/14702541.2014.978807>
- [2] **Wallace C.**, Vincent K. (2017) Community Well-Being and Information Technology. In: Phillips R., Wong C. (eds) *Handbook of Community Well-Being Research*. International Handbooks of Quality-of-Life. Springer, Dordrecht. DOI: [https://doi.org/10.1007/978-94-024-0878-2\\_9](https://doi.org/10.1007/978-94-024-0878-2_9)
- [3] **Webster, G., Nguyen, H., Beel, D., Mellish, C., Wallace, C** and Pan, J. 2015. CURIOS: Connecting Community Heritage through Linked Data. In *Proceedings of the 18th ACM Conference on Computer Supported Cooperative Work & Social Computing (CSCW '15)*. Association for Computing Machinery, New York, NY, USA, 639–648. DOI: <https://doi.org/10.1145/2675133.2675247>
- [4] **Farrington, J.**, Philip, L., Cottrill, C., Abbott, P., Blank, G., & Dutton, W. H. (2015). Two-speed Britain: Rural internet use. Available at SSRN 2645771. <http://dx.doi.org/10.2139/ssrn.2645771>
- [5] Tait, E., MacLeod, M., **Beel, D., Wallace, C., Mellish, C.** and Taylor, S. (2013, November), Linking to the past: an analysis of community digital heritage initiatives, *Aslib Proceedings*, Vol. 65 No. 6, pp. 564-580. DOI: <https://doi.org/10.1108/AP-05-2013-0039>
- [6] **Beel, D., & Wallace, C.** (2020). Gathering together: Social capital, cultural capital and the value of cultural heritage in a digital age. *Social & Cultural Geography*, 21(5), 697-717. DOI: [10.1080/14649365.2018.1500632](https://doi.org/10.1080/14649365.2018.1500632)
- [7] **Beel, D., Wallace, C., Webster, G.** and **Nguyen, H.**, 2015. The geographies of community history digital archives in rural Scotland. *Scottish Geographical Journal*, 131(3-4), pp.201-211. DOI: [10.1080/14702541.2014.980839](https://doi.org/10.1080/14702541.2014.980839)
- [8] **Beel, D.E., Wallace, C.D., Webster, G., Nguyen, H., Tait, E., Macleod, M. and Mellish, C.**, 2017. Cultural resilience: The production of rural community heritage, digital archives and the role of volunteers. *Journal of Rural Studies*, 54, pp.459-468. DOI: <https://doi.org/10.1016/j.jrurstud.2015.05.002>

#### Grants:

[P1] Edwards, P; **Fairhurst, G**; Nelson, J; **Wallace, C** and Wilson, P dot.rural Digital Economy Research Hub; EPSRC 10/2009-03/2015, (GBP11,814,897)

[P2] Edwards, P; **Wallace C** CURIOS Mobile, Scottish Funding Council (SFC); 01/13-06/14; (GBP 39,904)

[P3] **Wallace C** EVIDANCE - Exploring value in digital archives and the Comainn Eachdraich, AHRC; 11/13-08/14; GBP33,177)

**4. Details of the impact** (indicative maximum 750 words)

Research led by Wallace and the wider dot.rural programme, mentioned above, has created a new understanding of how digitisation projects in rural communities can help to enhance social, economic and cultural resilience. Building upon innovative, community-led research into cultural heritage and social quality, they have demonstrated how digital infrastructure can improve community cohesion, rural resilience and can create economic value.

**Creating a shared resource for use by local history societies and international visitors**

Working directly with historical associations in remote communities, Wallace and her team's research directly contributed to the creation of 'Hebridean Connections' (<https://www.hebrideanconnections.com/>), launched in late 2013 and representing an online archive of local history collections, hosted on the CURIOS digital platform and CURIOS mobile application [S1i]. The research was used in the development of the platform to inform the development team about the ways in which local communities might access the resource – both to update and view the collections – the likely 'digital know-how' of the users and the broader challenges of digital connectivity in these remote areas. This resulted in a low-cost, open source database that is widely accessible and user-friendly, adding value to the existing collections, not least by preserving the resources. Tristan ap Rheinallt, project manager of Hebridean Connections, has said:

*'Without the CURIOS platform, we would still have a website whose content was static because we couldn't afford user licences and other costs' [S1ii].*

**Community building through curation of local culture**

Digitisation encouraged communities to come together and decide, collectively, what was worth preserving and what was not. The platform has also enabled the volunteer members to maintain control and ownership of their digital presence, which in turn has supported community building. According to Colin Halliday, secretary of Bernera CE, it has '*...help(ed) build a community. A sense of progress... of being digitally active and digitally archiving*' [S2]. HC now comprises over 70,000 records relating to the genealogy, history, traditions, culture and archaeology of the Outer Hebrides, which are freely accessible to the world. Data analytics from the HC website evidence increased activity year on year, rising from 7,974 new users in 2014 to 44,049 in 2018, totalling 151,096 total site visits from 153 different countries [S3]. In 2016, the Arts and Humanities Research Council (AHRC) commended the project for capturing the '*energetic production of community heritage*', catalysed by digitisation. The project demonstrates the cultural value created by heritage through '*developing connections between land, people and place that are fundamental to ... Gaelic culture*' [S4].

Hebridean Connections has inspired further projects in rural communities within the Outer Hebrides, supported by a common methodology, and underpinned by Aberdeen research [6-7]. These methodologies have involved developing links with the communities in order to co-create projects, focusing on the process by which local history can be identified, shared, and how this contributes to community cohesion, social mobilisation and rural development. This has included digitising historical and contemporary resources for the Isle of Jura and a set of projects in the North East of Scotland. This included 'Storytelling Lumsden', a digital story telling project (2015-2016) in the village of Lumsden, which aimed to empower artists and communities through collective learning and skill development through an interactive map; working with volunteers from The Salmon Bothy in Portsoy to begin digitising their archives; and helping the 'Scottish Sculpture Workshop' to broadcast their craft more widely (Fairhurst) [S5]. Qualified genealogist, Gene Genie Scotland stated:

*'The Portsoy community has been fortunate to benefit from the skills and funding made available through the dot.rural project. We now have a unique opportunity to build on what has already been achieved and create something, which will serve as a valuable tool for anyone interested in Portsoy's heritage' [S6].*

### **Supporting and strengthening communities, through skills training, collective decision making and economic benefits**

Digitisation encouraged communities to come together and decide, collectively, what was worth preserving and what was not. The platform has also enabled the volunteer members to maintain control and ownership of their digital presence that in turn has strengthened feelings of social inclusion. More broadly, the work has led to the generation of cultural capital through sharing local knowledge, languages and dialects, all of which contributes to the strengthening of these communities [S2]. This includes informing the implementation strategy of Cybermoor Services Ltd, the first rural broadband social enterprise in the UK - raising their profile nationally and with EU partners and informing the customer base [S7].

The digitisation of cultural heritage also created economic benefits for the communities involved. Through the partnership with CURIOS, the Hebridean Connections project leveraged external funding (GDP145,000) from the Scottish Government's People and Communities Fund (PCF), the Heritage Lottery Fund (HLF), Comhairle nan Eilean Siar (CnES) and the Scottish Council for Voluntary Organisations (SCVO) in order to support the extension of activities and website to new geographical areas. The budget led to employment of two full time posts for three years [S8]. By encouraging visitors to the area this also enhanced the economic resilience of remote communities.

### **Community resilience and wellbeing: informing national policy**

Wallace's research and that of the wider dot.rural hub has been instrumental in demonstrating that rural areas have specific characteristics that create challenges around issues such as quality of life and wealth creation. In 2014, as part of the Scottish Universities Insight Institute (SUII), a joint programme between Scottish universities and Scotland's Futures Forum, Scottish Government, Wallace led a project titled 'The Path to Wellbeing' [S9i]. SUII sought to address the key issues around social, environmental and economic wellbeing with the aim of making a contribution to the development of policy and practice in Scotland and this has contributed to the development of Scotland's National Performance Framework, 'Scotland Performs' [S9ii].

In 2019, Wallace was invited to give evidence to the House of Lords Select Committee on the rural economy and to the House of Commons Environment, Food and Rural Affairs Committee on rural broadband [S10i]. In September, the Environment, Food and Rural Affairs Committee released the report of session, which drew on evidence presented by Wallace stating, '*Professor Claire Wallace and Dr Lorna Philip, two academics specializing in the urban rural divide, recommended that future digital services policies should reflect "needs not numbers" to ensure that the rural minority had the same digital opportunities as the urban majority*' (Chapter 3, 'Digital public services in rural areas', paragraph 25, p16) [S10ii]. Conclusions from the report draw on evidence presented by Wallace (and others), as reflected by the recommendation (in para25, p16) for Government to 'prioritise delivering improved connectivity for people, primarily in rural areas, with no access to adequate broadband or reliable mobile signal' (Section 3; paragraph 30, p17) [S10ii].

### **5. Sources to corroborate the impact** (indicative maximum of 10 references)

[S1 (group)] (i) Hebridean Connections website, acknowledges UoA as key partner; (ii) presentation given by Project Manager of Hebridean Connections (outlines the value of the CURIOS platform (2013-15) and testimonial

[S2] Testimonial from secretary of Bernera CE, highlights benefit of platform to the community

[S3] Visitor statistics from Hebridean Connections website (2014-2018)

[S4] AHRC report (2016), 'Understanding the value of arts and culture', p.84.

[S5 (group)] Project details of Storytelling Lumsden and The Salmon Bothy in Portsoy

[S6] Statement from Gene Genie Scotland (<http://www.genegenie-scotland.co.uk/>)

[S7] Testimonial from Chief Executive Officer of Cybermoor Services Ltd

[S8] Am Paipear 2015 news article detailing support for digital skill development and basic training to community groups

[S9 (group)] (i) Scottish Universities Insight Institute (SUII); (ii) project details and programme

[S10 (group)] (i) Details of evidence presented to Select Committee and Rural Affairs Committee; (ii) HoC report (2019)