Impact Report
Wicipobl Project

Assessing the impact of Wikimedia based activities in the culture sector

Jason Evans
31 March 2019
Summary

The purpose of this study is to explore and document the changes, or impacts, to different stakeholder groups of delivering a range of Wikimedia based activities focused around collections at the National Library of Wales.

The Wicipobl (Wiki-people) Project was designed using Europeana’s Impact Playbook to create clearly defined change pathways with measurable outcomes (changes). Desired outcomes focused on working with the creative and education sectors to produce Welsh language content which would benefit those studying the history of Wales and its people, raising the standard of Welsh language education in the process. Desired impacts also included exploring the economic benefits of producing open data and aligning activities to the Government's Welsh language strategy.

Measurement methods ranged from using Wikimedia metrics tools to analysing feedback from event participants to better understand social and economic benefits.

The project focused around the release of 4,862 Welsh portraits to Wikimedia Commons and associated metadata to Wikidata, with an emphasis on improving access to Welsh language content and providing opportunities for the public to engage through the medium of Welsh.

Through mapping our English language metadata for each artwork to Wikidata and ensuring all relevant labels were translated into Welsh, we were able to offer access to the dataset in Welsh for the first time. This data was used to help create nearly 1,500 new Welsh Wikipedia articles, utilizing 25% of the images. These images generated 1.6 million page views in 55 languages in the space of a month, greatly increasing access to information about Welsh people.

Working with Menter Iaith Môn, a series of events were held at schools. 50 articles were created by students aged 17-18 and feedback shows that most gained the confidence to edit Wikipedia on their own. Pupils also overwhelmingly recorded a feeling of pride and satisfaction in being able to contribute to Wikipedia. Feedback from teachers, and a separate report by Menter Iaith Môn highlighted how Wikipedia-based learning contributed positively to schools’ targets for the Welsh language and digital literacy.

A ‘hackathon’ event demonstrated the value of open data to the creative industries in Wales and a number of use cases were documented.

The project demonstrates how working with Wikimedia can help cultural heritage institutions build and support new communities and achieve outcomes which align with their core values whilst increasing access to, and use of, their digital collections.
# Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summary</td>
<td>2</td>
</tr>
<tr>
<td>Background</td>
<td>4</td>
</tr>
<tr>
<td>Project planning with the Impact Playbook</td>
<td>5</td>
</tr>
<tr>
<td>Change</td>
<td>8</td>
</tr>
<tr>
<td>Creative Industries</td>
<td>8</td>
</tr>
<tr>
<td>Education</td>
<td>11</td>
</tr>
<tr>
<td>Community</td>
<td>14</td>
</tr>
<tr>
<td>Welsh Government</td>
<td>15</td>
</tr>
<tr>
<td>Conclusion</td>
<td>17</td>
</tr>
</tbody>
</table>
Background

The National Library of Wales (NLW) began working formally with Wikimedia UK in 2015 with the appointment of a Wikipedian in Residence. Such was the success of the Residency that NLW made this collaboration a core part of its activities. It has held dozens of Wikipedia-focused outreach events, shared nearly 20,000 digital images on Wikimedia Commons, and have innovated in converting collection metadata to linked open data, using Wikidata.

In 2017, NLW appointed a permanent 'National Wikimedian' in order to secure the future of this collaboration, which has generated over half a billion views of Wikipedia articles containing NLW images and the creation of thousands of Wikipedia articles relating to Wales, in multiple languages. The project has also attracted funding from Welsh Government who have identified the value of Welsh language Wikipedia events, or ‘Edit-a-thons’ in particular, to its Welsh Language Strategy.

The library also produced an ‘Open by Default’ paper, reaffirming its 2013 commitment to providing open access to its collection, and setting out a roadmap for increased open access during its current strategy cycle (2017-2021)

In 2018 Europeana launched the first phase of its Impact Playbook⁠¹ - a resource aimed at helping cultural heritage professionals to identify and assess the impacts of their activities. The National Library of Wales was invited to produce a case study, using the Playbook to plan a Wikimedia-based project and to report on its impacts.

The resulting Wicipobl (Welsh for 'Wiki-People’) project, funded by the Welsh Language Unit of Welsh Government, focused on the Welsh language. The project covered a broad range of Wikimedia-based activities, from sharing digital images and datasets to educational outreach and a ‘hackathon’, all planned in a way that allowed for the collection of feedback and measurement of impact. 5,000 artworks from the Welsh Portrait Archive were the focal point for the project, along with open data associated with the Dictionary of Welsh Biography.

⁠¹ Europeana Impact Playbook - introduction
During the planning process, education was identified as a key area of interest, and NLW partnered with Menter Iaith Môn (a Welsh language initiative in Anglesey) and its own Wikimedia UK sponsored Wikipedian in Residence, Aaron Morris, to deliver a series of edit-a-thons in schools.

Project planning with the Impact Playbook

Being ‘Open by Default’ requires a strategic approach. This approach should involve the design and embedding of activities within the organisation in such a way which seeks to maximise, and demonstrate the impact of removing barriers to engagement and re-use.

The Impact Playbook sets out a framework for capturing the strategic aims of a project from the outset and helps the project manager to set out a series of clearly defined ‘change pathways’. Change pathways set out how each strategic goal will be achieved and, importantly, how those goals should be monitored and measured in order to demonstrate impact.

For the purpose of this report ‘Impact’ is defined as changes that occur for stakeholders or in society as a result of activities. In this case the focus will be on activities for which the National Library of Wales is accountable.

Kick-off Workshop

The process began with a Kick-off Workshop. Staff considered the Library’s own strategic priorities, operational targets and desired impacts as they compiled a long list of stakeholders who would be most likely to benefit from access to the Welsh Portrait Collection. This list was then sorted into groups, which gave us our main segments:

- Community
- Education
- Creative industries

Change Pathways

During a Change Pathway workshop, personas and empathy maps were used to focus on the pains and gains of each stakeholder group. The gain was summarised as a single sentence, or ‘offer’ that could then translate as an impact for that group of beneficiaries. For example, the ‘lack of relevant open access resources’ might be a ‘pain’ for teachers when planning lessons. The ‘gain’ might be to ‘make information about important historical figures freely available online’. The change pathway would then be developed to map out what kind of resources and activities would be needed to achieve this goal, and how the outcomes resulting from those activities could be measured.

Within the Playbook’s framework, ‘Strategic Lenses’ are used to help understand the perceived value of activities from a specific perspective. For example, a Wikipedia editing event, or ‘Edit-a-thon’ might result in very different impacts from a Community perspective than from a Learning perspective. This was all taken into consideration by staff when building the change pathways for this project.
Aligning with funders’ strategic aims
Before the planning process even began, we were familiar with our funder’s strategy and therefore decided to treat the Welsh Government as a stakeholder. We developed change pathways that focused on the users/beneficiaries and our activities were then tailored and fine-tuned to deliver the aims of the funder’s strategy, specifically:

- Increase in the use of Welsh Wicipedia and Wikidata in formal Education
- Community and volunteer engagement with Welsh language and Welsh history via events and projects aimed at improving the Welsh Wicipedia.
- Increase in Welsh language open content (wikipedia articles) and data (Wikidata).²

The use of Strategic Lenses demonstrated that, broadly speaking, the change pathways identified for other stakeholders also aligned with the strategic aims of the project funder.

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Resources</th>
<th>Activities</th>
<th>Outputs</th>
<th>Short - Outcomes - Long</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creative Industries</td>
<td>provide access to open data and encourage reuse</td>
<td>Share Welsh portrait archive on Wikimedia platforms &amp; run events</td>
<td>New articles about artists open data available for reuse examples</td>
<td>Improved Welsh culture online</td>
<td>Greater cooperation with creative industries for the benefit of the people of Wales and those studying Welsh history</td>
</tr>
<tr>
<td>Education</td>
<td>infrastructure for running educational outreach programmes and improve access to educational resources</td>
<td>Educational editing events in schools &amp; create linked data for Portrait Archive</td>
<td>Teachers confident using Wikipedia &amp; New Wiki articles &amp; Data visualisations for teachers</td>
<td>Schools regularly contributing to Wikipedia</td>
<td>Inspiring the use of our data to teach and study the history of Wales and its people &amp; contributing to a better standard in Welsh education</td>
</tr>
<tr>
<td>Community</td>
<td>Dedicated Volunteer coordinator and Wikimedian in residence</td>
<td>Host Community / public events</td>
<td>New Wikipedia articles &amp; Bilingual data &amp; info about collections</td>
<td>Improved Welsh culture online</td>
<td>Collections used and developed to support economic development in Wales.</td>
</tr>
<tr>
<td>Government</td>
<td>promoting, creating and sharing Welsh language content</td>
<td>Host Community / public events</td>
<td>Teachers trained in Wikipedia &amp; New Welsh Wiki articles and Wikidata</td>
<td>More Welsh speakers engaging with Wicipedia and improved access to Welsh language data</td>
<td>Contribute to Welsh Government 2050 language strategy by increasing use of Welsh verbally and digitally</td>
</tr>
</tbody>
</table>

² Cymraeg 2050, 2018-19 Action Plan. PDF
Methodology

In order to ensure we could measure the desired changes, or impacts, identified in the planning process, measurement methodology was added to the change pathways, setting out how each outcome would be captured and monitored.

Some outcomes such as an increase in open content can be measured using tools designed specifically for this purpose, such as the Wiki-Metrics suite, which makes it possible to monitor the output of a specified cohort of editors. Other, more abstract impacts such as social impact or a change in attitude were measured using carefully designed questionnaires which will then be collected and analysed.

<table>
<thead>
<tr>
<th>Creative Industries</th>
<th>Improved Welsh culture online. Connect data to wider open data network. Economy benefits from open data</th>
<th>Number of Wiki articles created * interconnectivity of Wikidata items * Hackathon feedback/outcomes</th>
<th>Wikidata Query, Wiki-Metrics, GLAMorgan image use stats, event questionnaires</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creative Industries</td>
<td>Increased understanding of Wikipedia as educational tool &amp; improved resources of educational value</td>
<td>Schools regularly contributing to Wikipedia &amp; Data used for teaching and researching Welsh history</td>
<td>Teacher &amp; student feedback * articles created and new editors registered * Higher Ed engagement</td>
</tr>
<tr>
<td>Education</td>
<td>Increased engagement and new skills for communities &amp; better access to Welsh history online</td>
<td>Improved Welsh culture online * self sufficient communities of Wicipedia contributors in English and Welsh</td>
<td>Wikidata query service, Questionnaires &amp; Wiki-Metrics</td>
</tr>
<tr>
<td>Community</td>
<td>More Welsh speakers engaging with Wicipedia and improved access to Welsh language data</td>
<td>More social use of Welsh language, more Welsh online, Welsh users using web in Welsh &amp; more Welsh data for commercial use</td>
<td>Wikipedia Stats, using tracking category, Wiki-Metrics, Questionaries</td>
</tr>
<tr>
<td>Government</td>
<td></td>
<td>No. of Welsh language participants * Quality of Welsh coverage on Wiki usage of new content</td>
<td></td>
</tr>
</tbody>
</table>
Change

The changes brought about by this project are arranged using the four main stakeholder groups, each representing a separate change pathway.

Creative Industries

“Greater cooperation with creative industries for the benefit of the people of Wales and those studying Welsh history”

Better access to information

Before the project, access to the pre-1880 Welsh portrait collection was limited to a traditional Library catalogue. Using Wikimedia Commons we released 4,862 portrait images into the public domain.³ Already 25% of images are being used in Wikipedia articles, where they are highly visible. 98% of the images are used on Wikidata, where they illustrate the open data for each image and items about the people they depict. In February 2019, 6,455 pages on 55 wikis used these images, generating 1.6 million file views.⁴

Library metadata for the collection was converted into linked data and added to Wikidata on a CC0 licence, providing context and background information for each image in a machine readable format, and in a way which allows users to query, download and re-use the data.

Our metadata had only been available in English, but by matching metadata fields with Wikidata items we were able to tap into the thousands of Welsh language labels which already exist on Wikidata, and identify and manually fill in the Welsh language gaps.

100% of the metadata is now in available in Welsh. This means it can easily be re-used in bilingual applications and will be more discoverable to search engines when users search in Welsh.

The creation of 1,349 new Welsh Wikipedia articles using this open data and translation tools will raise awareness of the artworks within the collection and make them more discoverable online. Access to information about the artists, printers and engravers of the works has also been improved. 211 articles have been created about those artists using a combination of NLW metadata and 3rd party data accessed through Wikidata. More detailed articles about connected Welsh people were created during a community translation event.

³ National Library of Wales portrait archive on Wikimedia Commons
⁴ GLAMorgan Wikipedia image view statistics
Re-use of data

In order to kickstart community re-use of this data we held a ‘History Hackathon’. We supported access to the Welsh Portrait data along with a host of other open datasets and API’s for our digital collections.

“Inspiring day at #HistoryHackathon in Cardiff thanks to @LLGCymru. Exploring their archive”

Outputs from the event included:

- Prototype of a tool for searching for names across multiple NLW websites
- Presenting the output of a data query as music
- Exploration of frequency of words and terms appearing in newspapers over time
- Heatmap of executions reported in the newspapers
- Visualisation of Tithe Map data on a modern map, colour-coded by landowner
- Google map of Domesday locations
- Improved and indexed data for Cardiganshire War Tribunal records, with visualisations

5 https://twitter.com/InglebyDavies/status/1101906133030187009
6 https://twitter.com/WIKI_NLW/status/1102516057909219328
7 https://twitter.com/WIKI_NLW/status/1101974124610666496
8 https://github.com/carlmorris/amledd-geiriau
9 https://github.com/harritaylor/hanes-hac-wta
● Research into the etymology of ‘Sion Corn’ (Santa Clause)
● Workflow for matching people in the Dictionary of Welsh Biography with images in Newspapers
● Visualisation of reasons given for appealing against army enlistment in WWI

More than 25 people attended the Hackathon during the day including academics, programmers, students, librarians and archivists. 100% of participants said the would be interested in attending the events again, and the feedback was overwhelmingly positive;

100% of those surveyed stated that the day gave them ideas for projects and 28% thought there could even be potential for commercial re-use of our open data and images.

10 https://github.com/glenrobson/Welsh-Tribunal-annotations/tree/grounds_stats
Education

“Inspire the use of our data to teach and study the history of Wales and its people whilst contributing to better standard in Welsh education”

Inspire

A series of events in schools were planned and delivered by Aaron Morris, Wikipedian in Residence with Menter Iaith Môn in North Wales. These sessions were designed to introduce pupils aged 17-18 to Wikipedia editing, while focusing on creating articles about Welsh people from the NLW Portrait collection and other open datasets. The aim was to encourage both students and teachers to consider how the Welsh ‘Wicipedia’ could be used effectively in the classroom in order to meet goals around digital literacy and the use of the Welsh language.

"The project has given me the opportunity to improve my coding skills and raising the status of the Welsh language"

Matthew Jones - Ysgol David Hughes, Anglesey

Pupils at 4 schools created 50 new articles. All said they would like to use Wikipedia in the classroom again and 90% said that following the events, they felt confident enough to contribute to Wikipedia on their own. Pupils overwhelmingly recorded a feeling of pride and satisfaction in being able to contribute to Wikipedia. 46% pupils went on to edit Wikipedia again in the 4 weeks following the events demonstrating a significant retention of editors.

Pupils were asked how the event made them feel in three words
The teachers surveyed also gave positive feedback and all claimed that the sessions gave them confidence to use Wikipedia as a teaching tool, stating that it could help them teach key skills such as editing, presenting information, literacy and bilingualism.

**Better information**

For Welsh language students it can often be difficult to find relevant information in Welsh. The Welsh Wikipedia has only about 100,000 articles compared to nearly six million in English, and articles are often shorter and less complete that those in English.

70% of pupils surveyed claimed they only ever used Wikipedia in English. All of these pupils were fluent Welsh speakers. However, 70% of those pupils claimed the reason for this was because their lessons were taught in English. This suggests a clear correlation between access to Welsh medium teaching and engagement with Welsh language content online.

All students surveyed said that they have used Wikipedia to help complete homework tasks. 50% said they regularly use Wikipedia, and for most pupils the reason was simply that Wikipedia is the easiest place to find the information they need, underlining the importance of maintaining and improving the quality of Wikipedia as a source of reliable information.

Creating new articles not only teaches pupils new skills, it improves access to information in Welsh. In their first month the 50 articles created by pupils were viewed 3,045 times. Overall, the project led to the creation of 1,444 new articles which will be monitored over time for use statistics.

The open data which has been made available has the potential to provide teachers with a way of querying, discovering and compiling relevant data to help with lesson planning and delivery. For example, a teacher might want to easily discover and collate information about all 19th century Welsh authors from Cardiff. The availability of queryable linked data allows educators to interrogate data answer these types of requests.

In order to lower barriers to access, users need to be able to query open data without specialist skills such as coding. An unexpected outcome of the project was a successful grant application to the MY-D Foundation in Switzerland to fund the creation of a visual time based finding aid, to filter and discover people in the Dictionary of Welsh Biography and Portrait Archive. It will be powered by the bilingual data on Wikidata, meaning it will be available in English and Welsh and will link to relevant NLW content and Wikipedia content.
This project will capitalize on open access policy and work carried out by volunteers, leading to the enrichment of our core websites with open data. The funders of this project were motivated by the desire to demonstrate how the culture sector are applying Wikidata within their own infrastructure rather than simply using it as a platform to share data. By profiling our stakeholders and gathering feedback throughout this project we gained a clear understanding of how this open data could be applied for the benefit of our users, leading us to this successful grant application.

New skills
As part of the contribution of Aaron Morris, Wikimedian in Residence to the project, a report was produced detailing how Wikipedia based projects complement traditional teaching methods and how this collaboration can be nurtured and upscaled.11

Morris has established a Wikipedia-based challenge as part of the Welsh Baccalaureate, and regularly works with schools in north Wales to run this challenge and host other Wikipedia editing sessions and lunchtime clubs.

The main benefit of involving school children in creating Wikipedia articles has been identified as the alignment of these activities with the Welsh Government's Digital Competency Framework12. This framework focuses on developing skill in the following areas.

- Citizenship – which includes:
  - Identity, image and reputation
  - Health and wellbeing
  - Digital rights, licensing and ownership
  - Online behaviour and cyberbullying
- Interacting and collaborating – which includes:
  - Communication
  - Collaboration
  - Storing and sharing
- Producing – which includes:

---

11 Aaron Morris - Wikipedia in Education report (Welsh)
○ Planning, sourcing and searching
○ Creating
○ Evaluating and improving
● Data and computational thinking – which includes:
  ○ Problem-solving and modelling
  ○ Data and information literacy

The feedback from teachers and schools who have hosted Wikipedia-based events is that Wikipedia-based lessons help them to achieve many of the targets set out in the above framework. Teachers stated that the events were particularly helpful in teaching skills around editing, presenting information, literacy and bilingualism. As a result of this project and the findings of Morris’ report it is hoped that the use of Wikipedia in schools can be increased through a programme of teacher training and further outreach events.

Community

“Our collections are used and developed to support economic development in Wales”

Building communities
Building and supporting communities using Wikimedia projects such as Wikipedia, Wikidata and Wikimedia Commons as platforms for output can help to bring people together to talk and learn. This creates an environment where the Welsh language can thrive and where like-minded people can share ideas and plan activities.

The Wicipobl project saw a total of 43 people taking part in physical events in schools or in public buildings. This led to the creation of 95 new Welsh Wikipedia articles and a number of data visualisations and prototypes for tools (outlined in Creative Industries). At this early stage it is difficult to assess the long-term gains brought about by these events, other then the increase in Welsh language content and data infrastructure. A high percentage (90-100%) of event participants stated that they would like attend events again in the future, suggesting that the likelihood of future participation is increased as a result of these events. Whether or not these communities will continue grow organically without outside support remains to be seen.

Communities can also be formed and built in digital spaces. To encourage online collaboration a Wicipobl Wikipedia project was established on the Welsh Wikipedia. This space acts as an online hub for the project, listing articles created, suggested improvements, resources and more. The advantage of an online space such as this is that is can easily continue to act as a meeting place for communities long after the initial project has ended.
Skills and confidence
Events also provide people with the opportunity to learn new literacy and ICT skills and to give them more confidence in their social and practical abilities. This in turn supports economic development in the workforce.

The focus of this project has been Welsh language content. Providing an environment where the Welsh language can thrive and where individuals can practice and apply their Welsh writing skills also encourages better the development of Welsh language skills.

Using Wikipedia in schools to improve digital literacy and Welsh language skills, as outlined in ‘Education’, is also likely strengthen Welsh language communities. Feedback from event participants shows that 90% now had the confidence to continue editing Wikipedia unassisted. 100% of students said they would like to use Wikipedia in the classroom again, suggesting the students were overwhelmingly both willing and able to continue contributing. There are already examples of social Wikipedia editing clubs being established in schools following classroom events hosted by Morris of Menter Iaith Môn as well as examples of students contributing to Wikipedia in their spare time.

Welsh Government

“Contribute to the Welsh Government’s ‘2050’ Welsh language strategy by increasing the use of Welsh both verbally and digitally”

Speaking Welsh

Increasing the use of the Welsh language among existing speakers is one of the Welsh Government's key themes in the 2018/19 action plan for their long term strategy to double the number of Welsh speakers to 1 million by 2050.13

The multilingual, collaborative and participatory nature of Wikimedia projects makes it easy to welcome and encourage contributions from Welsh speakers. All of the main Wikimedia platforms,  

13 Cymraeg 2050, 2018-19 Action Plan. PDF
including Wikipedia, Commons and Wikidata have a Welsh language interface and support the creation of Welsh language content.

All 6 events held as part of this project created a safe and welcoming environment for participants to use Welsh. Presentations and training were provided through the medium of Welsh at all events.

**Using Welsh digitally**

The Welsh language has a limited digital footprint and most popular websites and apps are not available in Welsh, often because the financial incentive for tech companies to invest is so low. Wikipedia and Wikidata present an opportunity for Welsh speakers to collaborate with the aim of increasing the amount and quality of digital Welsh language content. The Welsh language Wikipedia is the most viewed Welsh language website, and Wikidata is fast establishing itself as the largest sources of linked open data in the world. The more Welsh language content there is available on these services, the more likely people will be to discover and reuse it.

Statistics show a spike in page views and the number of editors contributing to the Welsh Wikipedia during January - February, when most events were held. January 2019 saw the most page views in one month since September 2015 (944,252) and the number of active editors was at its highest level since 2013 (264). The total number of edits made on the Welsh Wikipedia in January was higher than in any other month in its history with 284,418 edits in total. These figures all suggest a positive change for the Welsh Government as a result of this project.

[Graph showing number of editors]

Sharing Welsh language data for NLW collections allows Welsh speaking developers and data enthusiasts to innovate and create new digital services in the Welsh language. For example, the existence of Welsh open data for people, means that the proposed timeline tool, outlined in ‘Education’ can operate bilingually with minimal need for manual translation.

54 [Wikimedia Statistics (CY Wikipedia edits)]
The 4 events held in schools highlight the benefits of using Wikipedia to teach a range of skills from digitally literacy to Welsh language skills, and the ability to provide these sessions through the medium of Welsh, further supports the Welsh Government's language action plan. Further details, and recommendations for a wider program of teacher training can be found in Morris' Wikipedia and Education report.

Conclusion

By developing and implementing a programme of engagement activities aimed at targeted stakeholder groups the project has clearly demonstrated a number of benefits of collaborating with Wikimedia to widen access to cultural collections.

The impact for institutions of releasing digital images into the public domain and sharing on Wikipedia has been well documented, but is again underlined here. A large increase in engagement with images was recorded mainly due to their use in Wikipedia articles. The hackathon event also served to demonstrate the additional value of releasing quality data for digital collections, by encouraging and recording a variety of examples of data re-use. The creation of nearly 1,500 new Welsh language articles also highlights the knock-on effect of releasing large amounts of open cultural data.

Due to the structure of the project, and the emphasis on measurement, the desired impacts around access and quality of open content can also be clearly demonstrated for the target stakeholders.

Change pathways have been shown to lead to an increased use of the language, growing communities, and an increased use of Wikipedia in the classroom. Initial findings certainly highlight the benefits of Wikimedia-based events and set out a strategy for upscaling engagement. Feedback shows that contributors, particularly in the school events, felt pride and satisfaction when contributing to Wikipedia, and this is backed up by the 46% retention rate of these editors during the
first month. However, in order to establish any long term changes as a result of the project, more time is needed to monitor editor activity, institution behaviour and government policy.

A follow-up study in 6 months or a year should be able to provide a clearer picture of long term trends, impacts and changes, which can be attributed to the Wicipobl project. It seems likely that long term support through facilitation of events and activities would be needed in order to maintain the high levels of engagement see during the course of the project.

The study has focused on impacts for the identified stakeholder groups and these impacts all align in some way with the NLW’s own strategy\textsuperscript{15}, which includes targets specific to the library’s Wikimedia UK collaboration, increasing open access, community engagement and supporting education. The Library is also committed to promoting and supporting the Welsh language. Besides direct benefits such as increased visibility, re-use and engagement with digital collections there is a clear reputational gain in being apart of innovative open access initiatives, and this is something which could be explored in more detail in the future.

\textsuperscript{15} NLW - The Nation’s Memory: Informing the Future Strategic Plan 2017-2021