Wikimedia in Education

Wikimedia UK in partnership with the University of Edinburgh

THE UNIVERSITY *of* EDINBURGH

Introduction

This booklet has been produced by Wikimedia UK and the University of Edinburgh, bringing together a collection of case studies from across the UK in order to provide insight into the use of the Wikimedia projects in education.

It is our belief that the Wikimedia projects are a valuable tool for education, and that engagement with those projects is an activity which enriches the student experience as much as it does the open web itself. Educators worldwide are using Wikimedia in the curriculum – teaching students key skills in information literacy, collaboration, writing as public outreach, information synthesis, source evaluation and data science. Engaging with projects like Wikipedia – particularly through becoming a contributor – enables learners to understand, navigate and critically evaluate information as well as develop an appreciation for the role and importance of open education. Once published, material produced by students becomes immediately accessible by a global audience, giving students the satisfaction of knowing that their work can be seen by many more people than just their tutor.

As individuals working in the open web in the twenty-first century it is incumbent upon us to embrace innovative learning, embedding into our practice those tools which equip our students to work collaboratively, be skilled digitally, and think critically.

Of our 14 examples, 13 pertain to higher education and one to secondary. This resource has been designed for anyone involved in education, and will be of particular interest to teachers, lecturers and learning technologists involved in open pedagogy and course design, or who have an interest in library skills, innovative learning, working on the open web, co-creation, collaborative working, or digital skills.

Feedback from both students and course leaders, at the University of Edinburgh and beyond, has consistently highlighted:

- Student-led creation of academic quality content, available to be shared and used by wide audiences.

- Students and course leaders having the opportunity to examine their subject area reflectively through a global, publicly engaged perspective.

- Students having the opportunity to learn and practise beginner-level coding skills and increase their digital competencies.

Contents

Margaret of Scotland (1469) by Hugo van der Goes. Public domain via Wikimedia Commons.

Women in Religion editathon, CC-BY-SA by Dr. Alexander Chow, University of Edinburgh

North Berwick witches. Public domain via Wikimedia Commons.

Julia Stephen by Jacques-Emile Blanche. Public domain via Wikimedia Commons.

The University of Edinburgh

The University of Edinburgh was the first university in the UK to employ a university-wide Wikimedian in Residence.

The Wikimedian works with course teams and students across the university to facilitate engagement with the Wikimedia projects as part of the University's strategy to develop information and digital literacy skills.

The Raeburn Room, Old College, Edinburgh – CC-BY-SA by Mihaela Bodlovic via Wikimedia Commons.

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> "We will enrich Wikipedia content with our research collections and expand the range of knowledge covered. We will contribute not only our research to Wikipedia, but do research with and about Wikipedia. We will use the data sets being shared and study how the work of knowledge sharing and gathering is conducted."
>
> **Melissa Highton**,
> Assistant Principal Online Learning, University of Edinburgh

At the University, courses at undergraduate and masters level are incorporating Wikimedia editing activities in many different parts of the curriculum. Many of the editing events have had a focus on addressing the underrepresentation, and improving the visibility, of women online, delivering on the University's commitment to equality, diversity, and the sharing of open knowledge.

Wikipedia's sister project, Wikidata, offers students the chance to engage with issues of data completeness, data processing, data analysis and data ethics. Importantly, students are also working practically with real world datasets and make use of a large range of tools and data visualisation techniques to tell engaging stories and help further discovery and areas for future research through linked open data and the semantic web. The skills attained through engagement with Wikidata are transferable to many disciplines from the sciences to digital humanities to cultural heritage.

Edinburgh Gothic editathon, CC-BY-SA by Mihaela Bodlovic via Wikimedia Commons.

In the first four years, we delivered 196 training sessions and 84 editathons, training 1,033 students, 476 staff, and 318 members of the public. A total of 617 articles were created, and 2,362 improved.

For academic colleagues, having a Wikimedia expert present has facilitated a growing understanding among staff and students of how information is created, contested and disseminated online. The role has provided new insight into how Wikipedia articles are constructed and Wikipedia's editorial processes, with evidence of a growing awareness among academics of the opportunities for teaching and learning that Wikipedia can provide.

Black History Month editathon, CC-BY-SA by Stinglehammer, via Wikimedia Commons.

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"By learning how to contribute articles to Wikipedia, students and staff become better able to evaluate how knowledge is constructed, curated and contested online. Alongside this, editing Wikipedia gives room for valuable development for students' research and communication skills, enabling them to make genuine contributions to knowledge."

Ewan McAndrew,
Wikimedian in Residence,
University of Edinburgh

Samhuinn Festival Wikipedia editathon, CC-BY-SA by Mihaela Bodlovic via Wikimedia Commons.

Wikimedia UK

Wikimedia UK is the national charity for the global Wikimedia open knowledge movement.

We work with the Wikimedia projects such as Wikipedia to enable people and organisations to contribute to a shared understanding of the world through open knowledge, with a focus on the knowledge and communities that have been left out by structures of power and privilege.

Wikimedia UK staff, CC-BY-SA by JW Lubbock.

Wikimedia UK's strategic aims for 2019-2022 are to:

1. Increase engagement with and representation of marginalised people and subjects.

2. Work with partners to develop digital, data and information literacy through Wikimedia.

3. Create changes in policy and practice that enable open knowledge to flourish.

4. Develop our capacity and profile as a leading organisation for open knowledge.

Our delivery model is based on the cross-cutting strategic priorities of partnerships, community and technology, which are an essential element of all our activities.

We work in partnership with the education sector to improve the digital literacy skills of both staff and students, with a particular focus on information and data literacy. Through our projects and programmes, students can develop their writing, research, evaluation and critical thinking skills whilst contributing to open knowledge that reaches millions of people.

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"Our work with the University of Edinburgh has been a flagship partnership for us, and has significantly deepened our understanding of how the Wikimedia projects can support the development of digital literacies alongside a wide range of other skills, whilst also helping to ensure that every single human being can freely share in the sum of all knowledge."

Lucy Crompton-Reid,
Chief Executive, Wikimedia UK

Wikimedia and Skills Development

Wikimedia projects of particular interest to teachers include: Wikipedia, Wikidata, Wikimedia Commons, and Wikibooks.

Wikimedia UK has produced a report mapping engagement with the projects to existing digital skills frameworks in the UK, which can be read on Wikimedia UK's website: **https://wikimedia.org.uk/wiki/Education**

The skills which can be enhanced through engagement with the Wikimedia projects include:

Wikipedia the online encyclopedia

- Computer and internet literacy, from opening an account to searching and critically evaluating information online.
- Creating, preparing (digitising, editing, converting), uploading, categorising, translating information and digital content.
- Collaboration, communication and consensus building in an online environment.
- Understanding reliable, verifiable sources, licences, consents, and copyright.
- Encyclopedic writing in the public domain, using citation softwares and referencing.
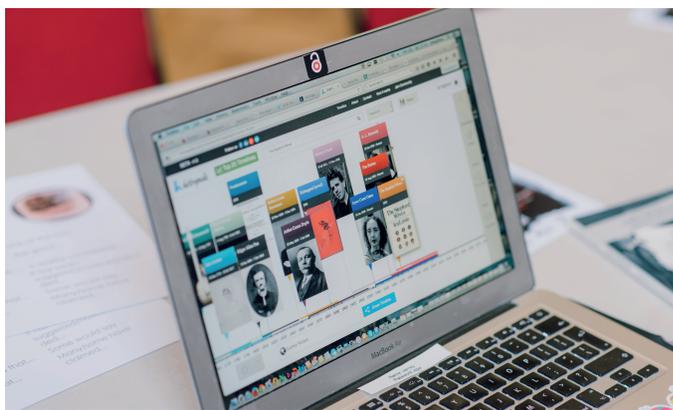
Edinburgh Gothic - Gothic authors Histropedia timeline, CC-BY-SA by Mihaela Bodlovic via Wikimedia Commons.

Wikidata an open database and central storage for structured data

- Understanding data concepts, data types, data functions and data characteristics.
- Importing, exporting, linking, reusing, and combining datasets.
- Understanding of Creative Commons database rights.
- Engaging with the development of data models, exploring and visualising your data.
- Collaborative data management.

Wikimedia Commons a host of media files and their metadata

- Understanding of free digital file types and formats.
- Understanding organisation of information and discoverability.
- Understanding the educational value of different types of content.
- Content reuse skills, including editing and improving images.

Wikibooks a collaborative, instructional non-fiction book authoring website

- Writing in Wikitext or in a combination of Wikitext, HTML, and CSS.
- Content creation, collaborative editing, translation.
- Editing (e.g. spelling, grammar and formatting).
- Understanding licensing (GFDL and Creative Commons).

World Christianity MSc, University of Edinburgh

Students each selected a topic to critically analyse, and synthesised peer-reviewed literature to create new articles on Wikipedia in the field of World Christianity Studies. The assignment provided an opportunity for the students' research to have a published output and increased the breadth and diversity of content online.

Course Leader
Dr. Alexander Chow, Senior Lecturer in Theology and World Christianity

Additional course support
Ewan McAndrew
University of Edinburgh's Wikimedian in Residence

Class size
7 students (2016)
8 students (2017)

Course duration
1 academic term

Course assessment
The production of a 1,000 word Wikipedia article, which accounted for 10% of this module's grade, and a class presentation of their article.

Learning outcomes

- Developing writing skills suited for a public audience.

- Increasing information & digital literacy, and critical thinking.

- Introducing collaborative writing, useful for future academic and work-based projects.

- Increasing sophistication in students' research skills; ensuring their research application is at an academic standard.
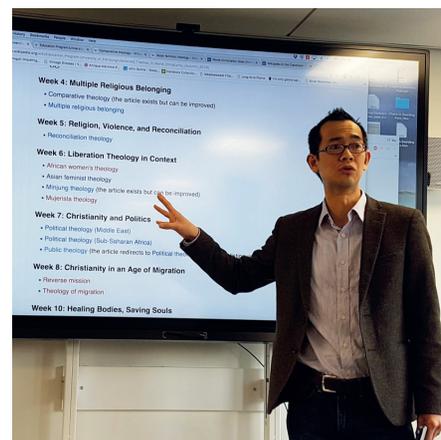
Dr. Alexander Chow, Senior Lecturer in Theology and World Christianity, CC-BY-SA by Stinglehammer.

Further support and resources used

- University of Edinburgh's Learning, Teaching & Web Services.

- Wikimedia UK's Programmes Team (remote support).

- The Wikimedia Manual of Style guidelines.

Impact beyond the classroom

- Seven new articles created in 2016 and eight in 2017.

- One of the students has continued to write Wikipedia articles in English and Chinese and was recently quoted in Wired magazine: **www.wired.co.uk/article/hong-kong-protests-wikipedia**

- Blog article by student Lucy Schouten at **www.cswc.div. ed.ac.uk/world-christianity-wikipedia/**

"The idea of using Wikipedia as an assignment became very intriguing because it would produce an end product which would have a life beyond the class. Secondly the type of scrutiny and editorial work that is done throughout the world on that particular article really challenges students to think academically. I saw these benefits not only in terms of the research being taught, but also in the possibility for the students to have something that lasts beyond the class."

Dr. Alexander Chow,
Senior Lecturer in Theology and World
Christianity

"When you hand in an essay, the only people that generally read it are you and your lecturer. No one [else] really benefits from it. With a Wikipedia assignment, other people contribute to it, you put it out there for everyone to read. It becomes more of a community project that everyone can read and access. I really enjoyed [using] it."

"It demystified creation of online resources especially in this context, Wikipedia. I believe we had all the help and resources necessary for a successful article. Thank you for this wonderful exposure, enabling in us the 'I can' spirit."

Student feedback,
World Christianity MSc

Women in Religion editathon, CC-BY-SA by Dr. Alexander Chow via Wikimedia Commons.

Reproductive Biology BSc, University of Edinburgh

4th Year Reproductive Biology Honours BSc students researched and developed new Wikipedia articles on previously unpublished medical terms relating to their course content. This assignment has been repeated each year since 2015.

Course Leaders
Dr. Chris Harlow, Dr. Simon Riley and Dr. Richard Smith
Reproductive Biology BSc, Programme Organisers

Additional course support
Ewan McAndrew, University of Edinburgh's Wikimedian in Residence

Anne Donnelly and Ruth Jenkins, Academic Support Librarians for the College of Medicine

Class size
25-51 students

Course duration
Two 3-hour workshops, one week apart in the Autumn and Winter semester

Course assessment
The exercise was not formally assessed, but provided direct experience of group working, enhancing skills that could be transferred to other assessed group work activities in the curriculum. The project allowed students and staff to explore what is offered by virtual public engagement spaces. In addition, students had access to numerous databases (both openly available and subscription-only) with one of the aims of the session being to introduce the students to these science-specific resources.

Learning outcomes

- Learning to write accessible articles for public audiences on medical subjects.
- Learning to use science-specific research platforms effectively in conducting research e.g. Scopus and Web of Science.
- Increasing information and digital literacy and critical thinking, (including lessons in Wiki-software formatting).
- Introducing collaborative writing, in a format well-suited to future academic and work-based settings.
- Increasing sophistication in students' research skills; ensuring their research application is of an academic standard.

Dr. Simon Riley, CC-BY-SA via Simon Riley.

Further support and resources used

- University of Edinburgh's Learning, Teaching & Web Services.
- Wikimedia UK's Programmes Team.
- The Wikimedia Manual of Style guidelines.
- Dr. Ally Crockford, Wikimedian in Residence at the National Library of Scotland, and Dr. Sara Thomas, Wikimedian in Residence at Museums Galleries Scotland.

Impact beyond the classroom

- The creation of approximately 8 new Wikipedia articles each year in the field of Reproductive Biomedicine through collaborative group research.
- Contributed to the growing Wiki culture and community within the university.
- Created a new article on one of the most common and fatal forms of ovarian cancer, which has now been viewed in excess of ninety thousand times since it was published in Sept 2016.

> "Working with colleagues from different disciplines, I found the process of introducing the whole class to a range of literature searching tools, setting them specific tasks to collect information, and then engaging a small group of students to help build the Wikipedia page a truly inspiring activity. To see the end product evolve on screen in front of me was very exciting!"

Dr. Chris Harlow

> "The session was informative and an enjoyable way to start the semester. It got me to consider different aspects of scientific communication and my involvement in it."

> "As a student it's a really good opportunity, it's a really motivating thing to be able to do; to relay the knowledge you've learnt in lectures and exams, which hasn't really been relevant outside of lectures and exams, but to see how it's relevant to the real world and to see how you can contribute."

> "I use Wikipedia a lot, so it was good to be able to understand exactly what goes into editing it. The assignment also helped me understand where to find valuable references in places I would not have known to look."

Student feedback, Reproductive Biology BSc

Ruth Jenkins, Academic Support Librarian at the University of Edinburgh Medical School, CC-BY-SA by Stinglehammer.

Translation Studies MSc, University of Edinburgh

A Wikipedia translation assignment was integrated into the Independent Study component of the MSc in Translation Studies, with students translating 1,500-2,000 words from a quality Wikipedia article and publishing to a different language Wikipedia in a wide variety of languages (Arabic, Chinese, Danish, English, French, German, Japanese, Norwegian, Spanish, Swedish, and Turkish).

Course Leaders
Dr. Hephzibah Israel,
Dr. Charlotte Bosseaux and
Dr. Şebnem Susam-Saraeva,
Senior Lecturers in Translation
Studies

Additional course support
Ewan McAndrew
University of Edinburgh's
Wikimedian in Residence

Class size
35-45 students

Course duration
1 academic term, delivered in
both the Autumn and Spring
terms

Course assessment
Students peer assess the
translation of one 1,500-2,000
word article into another
language Wikipedia.

Learning outcomes

- Developing practical translating skills suited for a public audience.

- Studying the transmission of knowledge across different language and cultural contexts.

- Challenging entrenched hegemonies and contributing to the free circulation of knowledge.

- Increasing critical thinking, in addition to information and digital literacy.

Translation Studies MSc students and course leaders, CC-BY-SA by Mengqi Yuan.

Further support and resources used

- The Content Translation tool: **https://www.mediawiki.org/ wiki/Content_translation**

- The Gapfinder tool for identifying missing articles in different lanaguage Wikipedias: **https:// www.mediawiki.org/wiki/ GapFinder**

Impact beyond the classroom

- 20-50 new articles created in different language Wikipedias each semester.

- Case study published about the assignment in *New case studies of openness in and beyond the language classroom*. Permalink: **https://doi.org/10.14705/ rpnet.2019.37.9782490057511**

- Video interviews with students: **https://media.ed.ac.uk/tag/tagid/ content%20translation**

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"It is very fun but challenging at the same time. I feel like I am doing something very meaningful. It not only helps me with my translation skills, but also makes me feel that I am contributing to Wikipedia; to people, to society."

"It is nice to see my work published and online, and the content translation tool meant that I didn't have to spend much time worrying about formatting."

"To be given the opportunity to translate something practical that will end up being read by people... just that motivation itself was the biggest positive."

"I was very excited about the fact that Wikipedia was going to be a project in our workshop in Translation Studies. For the first time, I am not a consumer of information, I am a producer. I am contributing to the present information out there."

**Student feedback,
Translation Studies MSc**
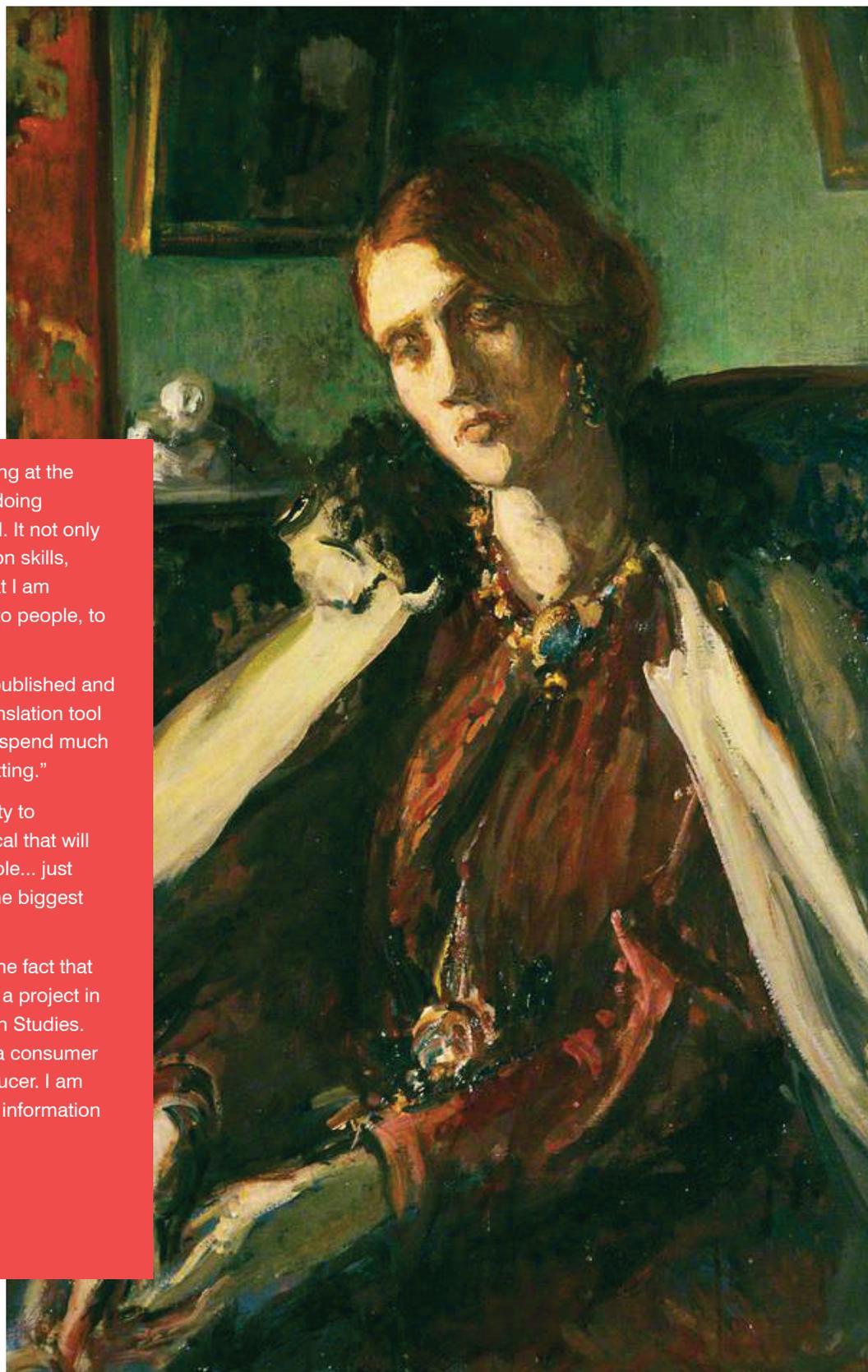
Julia Stephen by Jacques-Emile Blanche. Public domain via Wikimedia Commons – one of the articles translated from English to German.

Life Sciences BSc degrees, Science Communication, Imperial College London

Final year Biochemistry and Biological Sciences BSc students at Imperial College London selected and improved Wikipedia articles within their Science Communication module by adding content to existing pages, including adding their own illustrations.

Learning outcomes

- Developing writing skills suited for a public audience.

- Increasing critical thinking, information and digital literacy.

- Introducing basic illustration and graphic design skills.

- Introducing collaborative writing, useful for future academic and work-based projects.

Dr. Steve Cook, (User:Polypompholyx). CC-BY-SA via Steven Cook.

Course Leaders
Prof. Stephen Curry, professor of Structural Biology, and Dr. Steven Cook, Principal Teaching Fellow in the Department of Life Sciences.

Class size
30 students

Course duration
1 academic term, featuring a 3-hour workshop introducing Wikimedia, Creative Commons, and practising Wiki mark-up language

Course assessment
Students were assessed on both their written inputs to Wikipedia, and their graphic additions uploaded to Wikimedia Commons.

Further support and resources used

- Wikimedia UK's Programmes team.

- The Wikipedia Manual of Style guidelines.

- Science communication and illustration workshops run by staff on the Science Communication module.

- Wikimedia Commons and the RCSB Protein Data Bank.

- User:Polypompholyx's Wikipedia page includes guidance for students.

Impact beyond the classroom

- 100 articles improved since 2012.

- Several illustrations and photographs were created and uploaded to Wikipedia pages to support the relevant compound's Wikipedia page.

- Contributed to the growing Wiki culture and community within the University.

"There are plenty of incomplete and missing articles on Wikipedia, and it would be great to get students involved in editing articles much earlier in their careers."

"The articles have to be on a scientific topic, and they typically choose life science topics, as that is their expertise (biology and biochemistry students). Some articles are created from scratch, others take existing articles and improve them. This is typically by rewriting the text to make it clearer, more complete and more up to date. Most articles end up with new sections, updated references, and additional media: either from Commons, or media they create and CC license themselves."

Dr. Steven Cook
Course Leader

Light micrograph of *Eimeria* parasites in a rabbit's liver. Made by Andi347, an ICL student. CC-BY via Wikimedia Commons.

Film and Media Studies BA, University of Stirling

Students created and co-edited a new Wikibook textbook exploring the topics covered in their adjacent modules on Digital Culture, which became an Open Education anthology in the subject area.

Learning outcomes

- Developing sophisticated writing skills suited for a public audience.
- Building critical thinking, information literacy and digital literacy skills.
- Introducing collaborative writing, useful for future academic and work-based projects.
- Increasing sophistication in students' research skills.
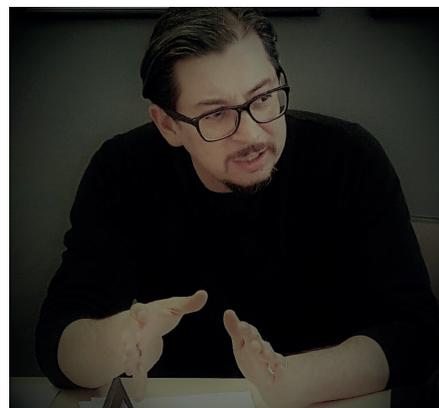
Dr. Greg Singh, University of Stirling. CC-BY-SA via Greg Singh.

Course Leader
Dr. Greg Singh,
Associate Professor in Communications, Media and Culture

Class size
56 students

Course duration
1 academic term

Course assessment
Students' contributions to the book were assessed on several levels, including the quality of the content in their chapters and on-wiki collaboration on talk pages and sandboxes prior to final submission.

Further support and resources used

- Wikimedia UK's Programmes Team (remote support).
- The Wikimedia Manual of Style guidelines.
- Wikibooks guidelines for class projects: **https://en.wikibooks.org/wiki/Wikibooks:Guidelines_for_class_projects**

Impact beyond the classroom

- The creation of several student-written Wikibooks Open Education textbooks on Digital Culture each year since 2014 with chapters including topics such as: Determinism, Convergence, Transmediality, The Internet of Things, Always-on Culture, Collective Intelligence, Information Society, Online Identity and more.
- Contributed to the growing Wiki culture and community within the University.

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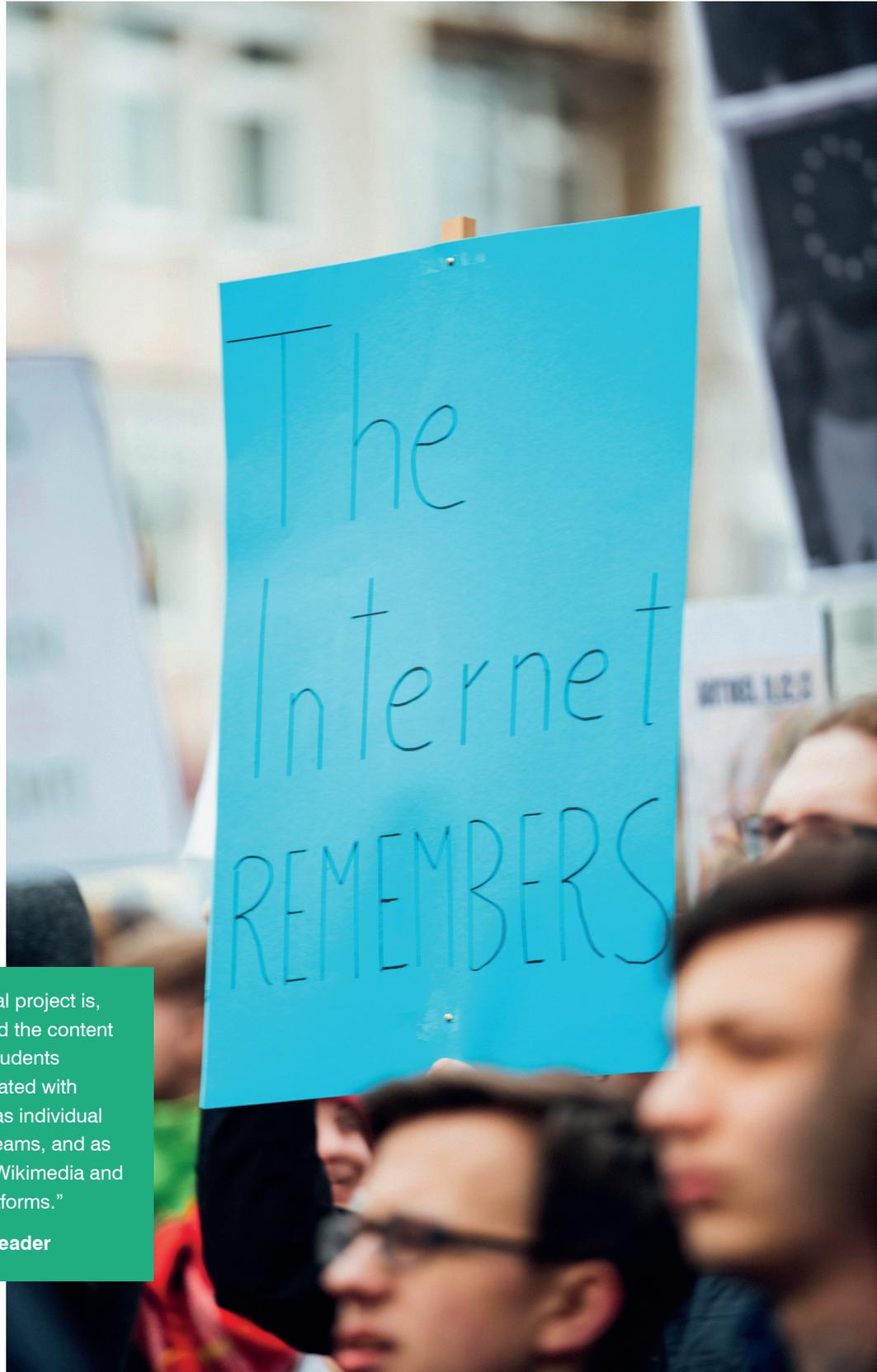
"The aim of this educational project is, firstly, for students to record the content of their learning and that students will learn the values associated with working at different levels as individual researchers, as research teams, and as research communities on Wikimedia and other open knowledge platforms."

Dr. Greg Singh, Course Leader

The Internet remembers. Save Your Internet – Demonstration against upload filter – Article 13 by Marcus Spiske. CC-BY via Unsplash.com.

History MA, Wikipedia and Medieval History, University of Sheffield

Students updated a Wikipedia article on a topic related to the medieval course content, then wrote a reflective essay on the process.

Course Leader
Dr. Charles West,
Reader in Medieval History

Additional course support
Remote support from the Wikimedia UK team

Class size
9 students

Course duration
1 academic term

Course assessment
The course was assessed through a 100% summative reflective essay of 1,500 words. Students were asked to think about how their editing experience had changed what they thought about Wikipedia, and its role in sharing historical knowledge worldwide. This has been expanded to 2,500 words for the next version of the course.

Learning outcomes

- Learning how to work collaboratively.

- Gaining experience in communicating academic knowledge to a global public.

- Understanding the epistemological implications of transferring academic knowledge to the encyclopedic form.

- Increasing critical thinking and media literacy.

Dr. Charles West, CC-BY-SA via Charles West.

Further support and resources used

- Wikimedia free online training.

- Advice from Wikimedia UK.

Impact beyond the classroom

- Improvement of eight Wikipedia articles and training of nine new Wikipedia editors.

- Encouraging historians working in the University and elsewhere to consider teaching with Wikipedia. Charles has fielded quite a few emails and questions from colleagues in Dundee, Kent and University of East Anglia.

"Our students here at Sheffield do fantastic work, [so] I wanted to teach a course which allowed them to apply their expertise to improve a global resource – as well as to reflect on the implications of Wikipedia's ever growing influence for history and historians."

Dr. Charles West, Course Leader

"It was really good to work on something that made a difference outside the university."

**Student feedback,
History MA**

St Mark at his writing-desk
(adapted from The Walters Museum,
MS W.4, fol. 90v). CCO.
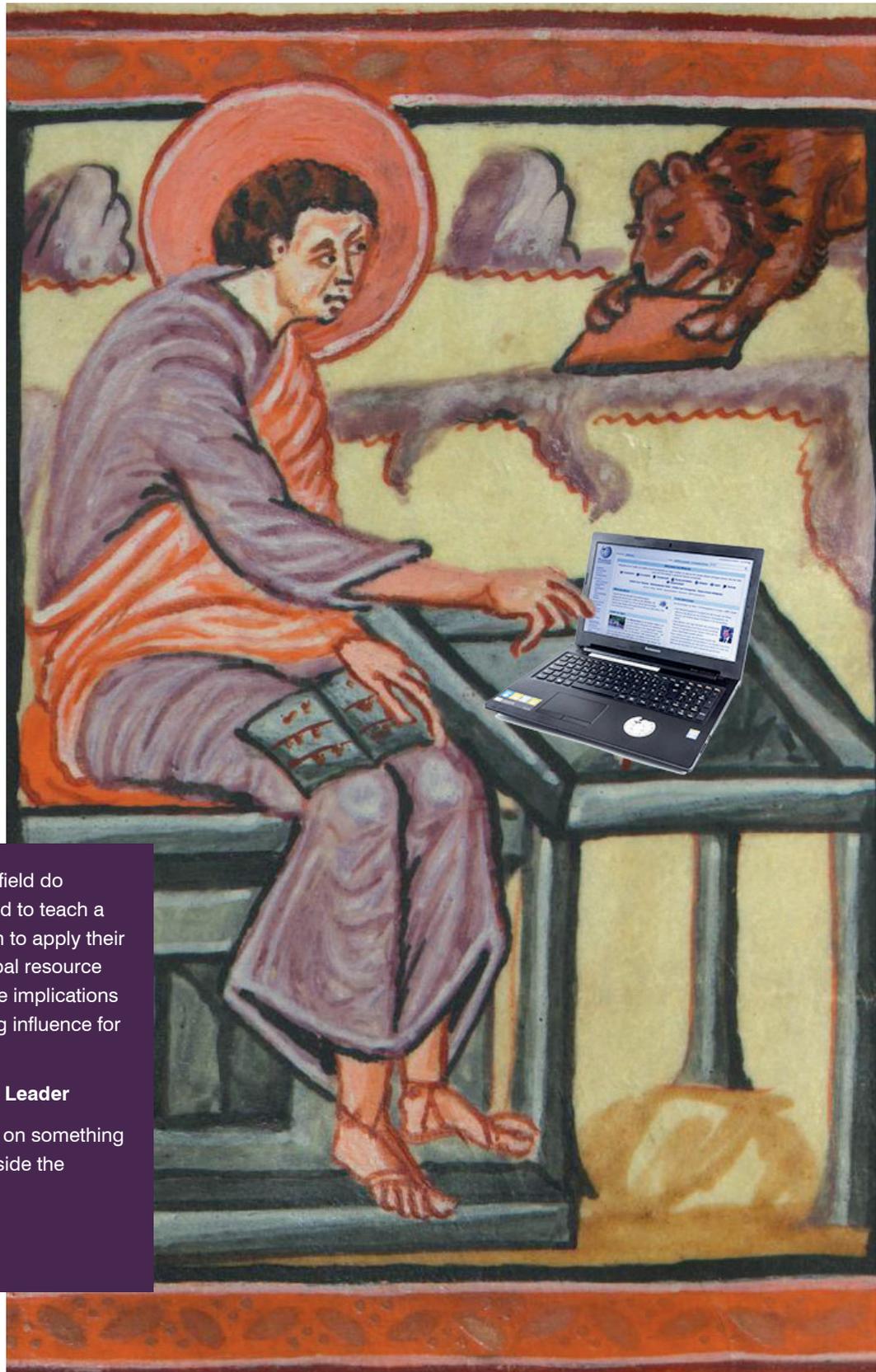
LLB Law, Competition Law: The Regulation of Dominance, Swansea University

Students critiqued an existing Wikipedia article on a competition law topic of their choice, and then amended or rewrote those articles.

Learning outcomes

- Bridging the gap between Law theory and practice.

- Developing students' ability to evaluate information.

- Being better equipped to apply and digest the relevant legal and economic principles.

- Enhancing students' written communication skills.

- Being better able to transcribe complex law concepts into terms understandable for lay audiences.

Mr. Richard Leonard-Davies, Senior Lecturer in Law, CC-BY via Swansea University

Course Leader
Mr. Richard Leonard-Davies, Senior Lecturer in Law, Hillary Rodham Clinton School of Law, Swansea

Class size
8 students

Course duration
1 academic term

Course assessment
Students were assessed on the quality and accuracy of their contributions to Wikipedia, in addition to the accuracy of the points made as part of their original article critique pieces.

Further support and resources used

- Wikipedia style guidelines.

- Wikipedia training materials.

- Wikimedia UK support team (remote support).

- Introduce students to using Wikimedia's Programs & Events Dashboard (**outreachdashboard.wmflabs. org**/) at the beginning of the module, a Wikimedia platform for managing editing events and assignments.

Impact beyond the classroom

- The creation and improvement of Wikipedia articles.

- Contribution to a growing recognition of Wikipedia as a respected and legitimate information source.

- The creation of new Wikipedia editors.

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"The use of Wikipedia in this way has been a great learning tool as it is particularly important for budding lawyers to be able to translate complex legal principles into straightforward and understandable advice, at all times, supporting their statements with evidence. By amending or creating a section of a Wikipedia article, the students were able to demonstrate the level of their actual understanding of the relevant legal and economic concepts and communicate them to their peers in a contemporary manner."

"Using Wikipedia as a learning tool has facilitated a more flexible working environment and encouraged broader discussion."

"As a lecturer, I'm learning from the students! Wikipedia has created a 360° learning environment."

Mr. Richard Leonard-Davies

Tips for successfully using Wikipedia in the classroom

1. Introduce students to using **Wikimedia's Programs & Events Dashboard** (**outreachdashboard.wmflabs. org/**) at the beginning of the module, a Wikimedia platform for managing editing events and assignments.
2. Monitor student engagement with the course via the Programs & Events Dashboard.
3. Encourage students to undertake the **Wikipedia Editing training modules**.
4. Take prior steps to ensure editing rejections are not due to **Wikipedia's restrictions towards new editors**.
5. Advise students on how to create new articles or amend articles by moving small amounts of text from the sandbox to the main space area.
6. Remind students that Wikipedia is a living community, and that there are options for feedback and discussion.
7. If using the Programs & Events Dashboard as an assessment tool, **ensure that students submit their work via a Word document first** using your institution's own plagiarism detection systems, otherwise the text on Wikipedia will be detected.

by Richard Leonard-Davies

Digital Media BA, Digital Cultures, Middlesex University

Digital Cultures is an undergraduate module, which encourages students to participate in the editing of Wikipedia articles and to develop quantitative literacy skills with Wikidata. Students document their engagement with weekly readings and make a series of edits which also follow up on the contributions of their classmates.

Learning outcomes

- Developing writing skills suited for a public audience.

- Increasing information and media literacy, and critical thinking.

- Introducing collaborative writing, useful for future academic and work-based projects.

- Increasing sophistication in students' research skills.

Stefan Lutschinger at Bletchley Park, CC-BY-SA via Stefan Lutschinger.

Course Leader
Stefan Lutschinger, Programme Leader Digital Media BA.

Class size
22 students

Course duration
2 academic terms (level 5)

Course assessment
Students contribute 1,500 words to Wikipedia pages in the subject area of digital culture in the form of two edits (500 words each) per student and two follow up edits (250 words each) on the contributions of their classmates.

Further support and resources used

- Middlesex University's Library Services.

- Online support from Wikimedia UK's Programmes Team and members of the Wikimedia Community.

Impact beyond the classroom

- Students' articles address Wikipedia's gender gap – by having a focus on article creation about the Women of Bletchley Park.

- Regular Wikipedia editathons (Ada Lovelace Day, Arts and Craft, WWII Women Codebreakers of Bletchley Park, UK National Elections).

- Wikipedian in Residence with the Museum of Domestic Design & Architecture (MoDA). **https://moda.mdx.ac.uk/**

"

"I learnt an important lesson in redundancy within language. Coming from an English Literature, Language and Journalistic background, I have always had to put more description and persuasive techniques into my work, but Wikipedia pushed me to entirely abandon my processes and only write the factual text that needed to go on the article."

**Student feedback,
Digital Media BA**

Field trip to Bletchley Park, CC-BY-SA
via Stefan Lutschinger

Design Informatics MA/MFA and the Survey of Scottish Witchcraft Data Project, University of Edinburgh

Design Informatics students on the Data Science for Design course were given the opportunity during the annual Data Fair project to work with the Survey of Scottish Witchcraft database. They imported data on Scotland's accused witches and witch trials from this resource to Wikipedia's sister project, Wikidata, as 5-star linked open data to give a real-world practical example of analysing, manipulating, contextualising and visualising data in engaging ways.

Learning outcomes

- Data analysis: the ability to analyse, learn from and visualise a range of data, in a way that demonstrates its relevance to particular contexts.
- Communication skills: discussing socially relevant issues, supported by the use of multiple data sources and appropriate analysis.
- Professionalism: working in collaborative, interdisciplinary teams to a high professional standard.
- Data literacy: developing data literacy through the practical application of working with a real-world dataset.

Further support and resources used

- Open source data reconciliation software, OpenRefine. **openrefine.org**
- Wikidata experts around the United Kingdom: including Dr. Martin Poulter, Simon Cobb and Histropedia's Navino Evans.
- The Project Directors of the Survey of Scottish Witchcraft database, Professor Julian Goodare and Dr. Louise Yeoman.

Impact beyond the classroom

- 3,219 unique items of linked open data for each accused witch in Scotland (spanning 1563 to 1736) created in Wikidata and items of data for each of the 2,356. individuals involved in trying these accused witches.
- Items of linked open data for the 3,210 witch trials.
- An A1-sized wooden map of accused witches in Scotland was laser cut by students using interactive pieces to illustrate the gender distribution of accused witches and the methods of torture employed in different regions of Scotland during the period.

Course Leaders

Dr David Murray-Rust, Lecturer in Design Informatics

Assistant Professor Benjamin Bach, Lecturer in Design Informatics and Visualisation.

Course assessment

100% coursework; two individual reports (1,000 words each, 30% each), a group report (2,000 words, 30%) and an ongoing professional collaboration component (10%) which was assessed through contributions to code and data repositories, and online group discussion.

> "In my opinion, it's quite useful to put learning practice into the real world so that we can see the outcome and feel proud of ourselves… we learned a lot."
>
> "After we analysed the data, we found we learned the stories of the witches and we learned about European culture, especially the witch hunts."
>
> **Student feedback,**
> **Design Informatics MA/MFA**

Laser cut wooden map of accused witches in Scotland by Design Informatics MA/MFA students. CC-BY-SA by Sumeyra Yazgan, Shanyi He and Yichun Sun.

Wikipedia in the school curriculum in Anglesey, Wales

In partnership with Wikimedia UK, the organisation WiciMôn have been running workshops in Anglesey, Wales, across several secondary schools to promote the Welsh language and Wikipedia literacy.

Learning outcomes

- Developing students' language skills, composing and editing articles in Welsh.

- Students developing their writing skills, writing in an encyclopedic format for a public facing platform.

- Students learning and developing their facilitation skills, when delivering their own Wiki Workshops in their communities.

- Basic coding skills, using Wikipedia's markup language.

Aaron Morris, CC-BY-SA via WiciMôn.

Course Leader
Aaron Morris,
WiciMôn Project Coordinator

Class size
5-10 students

Course duration
Several workshops taking place across each academic term

Course assessment
Students are assessed on their delivery of their own Wiki Workshops in their local community, with the remit to engage others beyond their classroom to edit Wikipedia in Welsh.

Further support and resources used

- Robin Owain, Wikimedia UK Wales Manager.

- Jason Evans, National Wikimedian at the National Library of Wales.

- Wikipedia training materials.

- Members of the Wikimedia community.

Impact beyond the classroom

- The WiciMôn project aims to raise the profile of the Welsh language nationally and internationally.

- Creating new articles on the historical, scientific and linguistic elements of Anglesey in Wales.

- The project educates people on open access and the benefits of sharing the sum of all human knowledge.

- Supports the Welsh Government's campaign to reach 1 million Welsh speakers by 2050.

Wikipedia Clubs

Students are now organising their own Wikipedia clubs during lunchtime. Wiki Ambassadors are appointed from the 6th forms, encouraging junior pupils to be involved in the project. The club gives students a further opportunity to edit and create articles, take pictures, upload images and create audio clips. This is a great opportunity for the students to transfer their skills and gain confidence.

"

''I enjoy writing articles about my interests and uploading them on the Wikipedia website. I've been learning coding skills, and I've written a few articles related to the work I'm studying in my science lessons and I'm looking forward to writing more!''

Mared Griffith, Year 12 pupil Ysgol Syr Thomas Jones, Amlwch

''WiciMôn has enabled me to create computer science-based articles to help bring the Welsh language into the 21st century.''

Rhys Jones, Year 12 pupil Ysgol Gyfun Llangefni

Masters in Public Health (MPH), Investing in Global Health and Development, University of Edinburgh

Adding to Wikipedia's Global Health related content. The students researched, synthesised and developed either one existing Wikipedia article, or created a new one, for the field of Global Health.

Learning outcomes

- Knowing how to write about Global Health for a public audience.

- Learning how to find and reference appropriate sources for communicating medical knowledge.

- Learning about the Global Health subjects of the students' choice.

- Learning about today's online publishing landscape.

Dr. Felix Stein, CC-BY-SA via Felix Stein.

Further support and resources used

- Wikimedian in Residence, Ewan McAndrew.

- WikiProject Globalisation.

- Wikimedia's Programs & Events Dashboard and training libraries.

- WikiProject Medicine's guidelines on reliable sources for biomedical topics.

Impact beyond the classroom

- Over 30 students trained and supported to add 180-200 words to Global Health related articles on Wikipedia. Edits to pages such as Obesity are now viewed 3,000 times a day on average.

- Article about the assignment written by Felix Stein: **http://globalhealthgovernance. org/blog/2018/11/19/editing-wikipedia-as-part-of-teaching-public-health**

- New assignment on the PG Global Health Challenges online course programme resulted from this assignment.

Course Leaders
Professor Devi Sridhar, Chair in Global Public Health and Founding Director of the Global Health Governance Programme

Dr. Felix Stein, Postdoctoral Research Fellow, the Usher Institute of Population Health Sciences and Informatics

Class size
35-45 students

Course duration
Three 1 hour workshops in the Autumn/Winter semester.

Course assessment
Obligatory requirement for passing the course.

"

"It was a wonderful exercise and good learning. Hope to do more of such exercises in future!"

**Student feedback,
Masters in Public Health (MPH)**

Film Studies BA, Research Methods, Queen Mary University of London

Identifying, evaluating and editing existing content in a Wikipedia article on a particular film. This assignment builds digital literacy and source evaluation skills where the students identify relevant research and scholarship to enhance the article before editing it to improve its scholarly quality.

Course Leaders
Dr. Jenny Chamarette (2012-2018), Senior Lecturer in Film Studies

Dr Sasha Litvintseva (2019-present), Lecturer in Film Theory and Practice

Class size
35-50 students

Course duration
Six weeks during the second year undergraduate module which is compulsory for all single-honours Film Studies students.

Course assessment
30% of overall module mark.

A group presentation giving a review and evaluation of a Wikipedia page on a specific film – no formal weighting, immediate informal feedback provided.

A group writing activity: editing the selected Wikipedia page to enhance its scholarly value – 30% of mark.

Learning outcomes

- Assessing the ways in which various contemporary online, library and archival resources in film gather and disseminate research, and the strategies by which you can best make use of and gain access to such resources in your research work.

- Via the editing of a Wikipedia page, students work within different domains of knowledge related to film and film studies, including academia and the worldwide web.

- Reflecting on the appropriate skills and methodologies required to undertake successful academic research in film studies.

- Confidently tackling other research-led modules at final year level.

- Creating a supportive work environment for you and your peers.

Further support and resources used

- Online support from Wikimedia UK's Programmes team.

- Support from members of the Wikimedia community.

- Support by the Queen Mary University Library team.

- Queen Mary University of Library resources.

Impact beyond the classroom

- Since 2015, over 35 film articles have been edited by ~200 students.

- These edits have been viewed over 6.1 million times.

- Dr. Chamarette's achievements have been recognised with Higher Education Academy Fellowship and an e-learning grant to develop student-led teaching materials.

Dr. Jenny Chamarette, CC-BY-SA via Jenny Chamarette.

" "I've developed the module collaboratively with students and staff, first as a pilot scheme in 2012/13, then as a compulsory core module from 2014/15 onward. I've been impressed to see how quickly students have engaged with source evaluation, digital literacy and fact-checking as they've worked on their chosen Wikipedia article, and by the general supportiveness of the Wikipedia community, especially Wikimedia UK. Significant advances in the ways that Wikipedia monitors engagement data have been a real asset to how I track students' progress in groups and as individuals. It's a great opportunity to help get students' expertise out there into the world, and students generally perform really well in this task."

Dr. Jenny Chamarette

Theology and Religious Studies MA, Modern Judaism: Aspects of Life and Culture, University of Glasgow

Building and expanding Wikipedia information on Jewish Scottish heritage. In small groups, students used archive material held at the Scottish Jewish Archives Centre to expand and develop two Wikipedia pages on key sites and figures related to Scottish Jewish heritage: the Garnethill synagogue in Glasgow and Scottish Jewish artist, Hannah Frank.

Course Leader
Dr. Mia Spiro, Lecturer in Jewish Studies (Theology & Religious Studies)

Class size
12-18 students

Course duration
2 academic terms (full year)

Course assessment
Assessment included two separate elements (20% of final grade:

Group assessment (10%). This was an overall assessment of the quality of the Wikipedia entry itself and the group's presentation of the project to the class.

Peer assessment and self reflection (10%). This included a section to reflect on how students worked as a group and a 4-page self-reflection outlining what students learned and how they participated.

Learning Outcomes

- Developing communication skills geared toward writing for a public audience.
- Facility for co-operative work and co-writing in group projects.
- Use of IT resources and web technology to facilitate learning.
- Developing advanced research and archival skills, including research accountability and the tackling of copyright issues.
- Sensitivity to the wider community and the ability to relate academic learning to practical contexts.


Dr. Mia Spiro, CC-BY-SA via Mia Spiro.

Further support and resources used

- Archival material from the Scottish Jewish Archives Centre.
- Training and help resources provided on Wikipedia.
- Peer assessment feedback sheets and group presentation rubric.

Impact beyond the classroom

- The Wikipedia pages the students worked on were expanded from stubs to full articles using research, photos, and links.
- The final evaluations showed that enabling students to become part of the knowledge-sharing community of Wikipedia was a highly successful and meaningful form of assessment.
- These pages continue to benefit the community, and are used, amended, and accessed by people looking for information on Jewish Scotland.

"With all the discussion around the importance of transferable graduate attributes, the idea of students producing an assessment on Wikipedia that is culturally relevant, digitally curated and publicly available make this an eminently practical and pedagogically rich exercise. Moreover, students were able to explore and relay the stories of historical figures from the city of Glasgow whose stories are inspirational for both students and the end users of the Wikipedia entries."

**Professor Scott Spurlock,
Head of Theology and Religious Studies**

"The Wikipedia project on Jewish Scotland was one of the best and most relevant exercises I've done in university."

**Student feedback,
Theology and Religious Studies MA**

Garnethill Synagogue by Stinglehammer. CC-BY-SA via Wikimedia Commons.
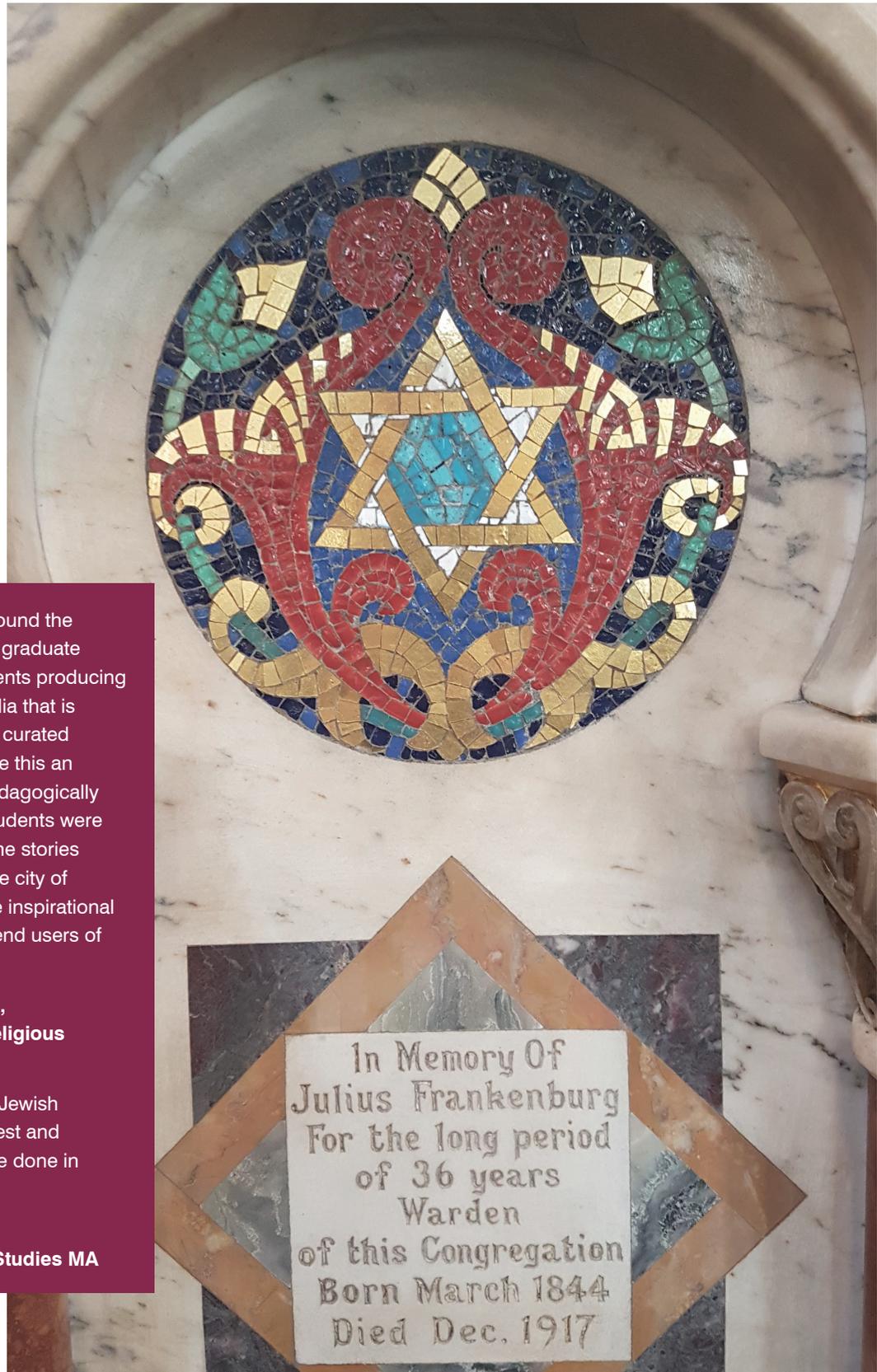
Course Leader
Caroline Ball, Academic Librarian and Associate Lecturer

Class size
10 students

Course duration
1 semester, 12 4-hour classes

Course assessment
Two summative assignments forming 100% of module grade:

Editing assignment requiring adding 1,500 words of content to an article of the student's choice plus a 500 word reflective report (40%).

Group assignment requiring a portfolio of mixed edits (new articles, translation, significant edits etc) plus a weekly reflective blog (60%).

Students were graded on: language, spelling and grammar (15%); engagement with Wikipedia editing community (35%); and engagement with Wikipedia standards and sources, and awareness of the requirements of the medium (50%).

Writing and Publishing BA, University of Derby

Creating and copy-editing articles, developing digital capabilities, enhancing understanding of Wikipedia. Over the course of a semester students edited and created new articles on topics of their choice, enhancing their understanding of Wikipedia and developing their digital literacy in the areas of research, academic referencing, copyright and plagiarism, open images and Creative Commons licensing, feedback, peer review and systemic bias.

Learning outcomes

- Tailoring style, content and tone to a client's manual of style and audience.

- Enhancing knowledge of decision making and editing in a dynamic and changing environment.

- Conducting research into the writing and editing process.

- Negotiating with others in a collaborative environment.

- Learning effective written communication and appropriate formatting and referencing.

Caroline Ball, Academic Librarian and Associate Lecturer, CC-BY-SA via Caroline Ball.

Further support and resources used

- University of Derby's Technology Enhanced Learning team.

- Wikipedia's Manual of Style guidelines.

Impact beyond the classroom

- Students made 1,090 edits across 124 articles.

- 51,700 words, 361 references and 6 brand new articles were added to Wikipedia.

- The articles have been viewed a combined 18.9 million times.

DERBY

> "Wikipedia proved to be a perfect tool to address a multitude of academic issues. It was a perfect vehicle to use with Publishing students to introduce them to the concept of writing for a client and complying with the client's requirements for style, tone, content, format, approach etc. It also proved a fantastic way to address a range of digital and information literacy issues in an accessible and entertaining way, using a resource the students are already familiar with – in one module we addressed copyright and plagiarism, how to reference, how to research, evaluation of sources, systemic bias in information sources, use of images online, Creative Commons, cyber safety and online harassment, feedback and peer review skills."

Caroline Ball

> "There wasn't really anything about it that I didn't like."

> "Felt like editing an article wasn't as daunting as I once thought."

**Student feedback,
Writing and Publishing BA**
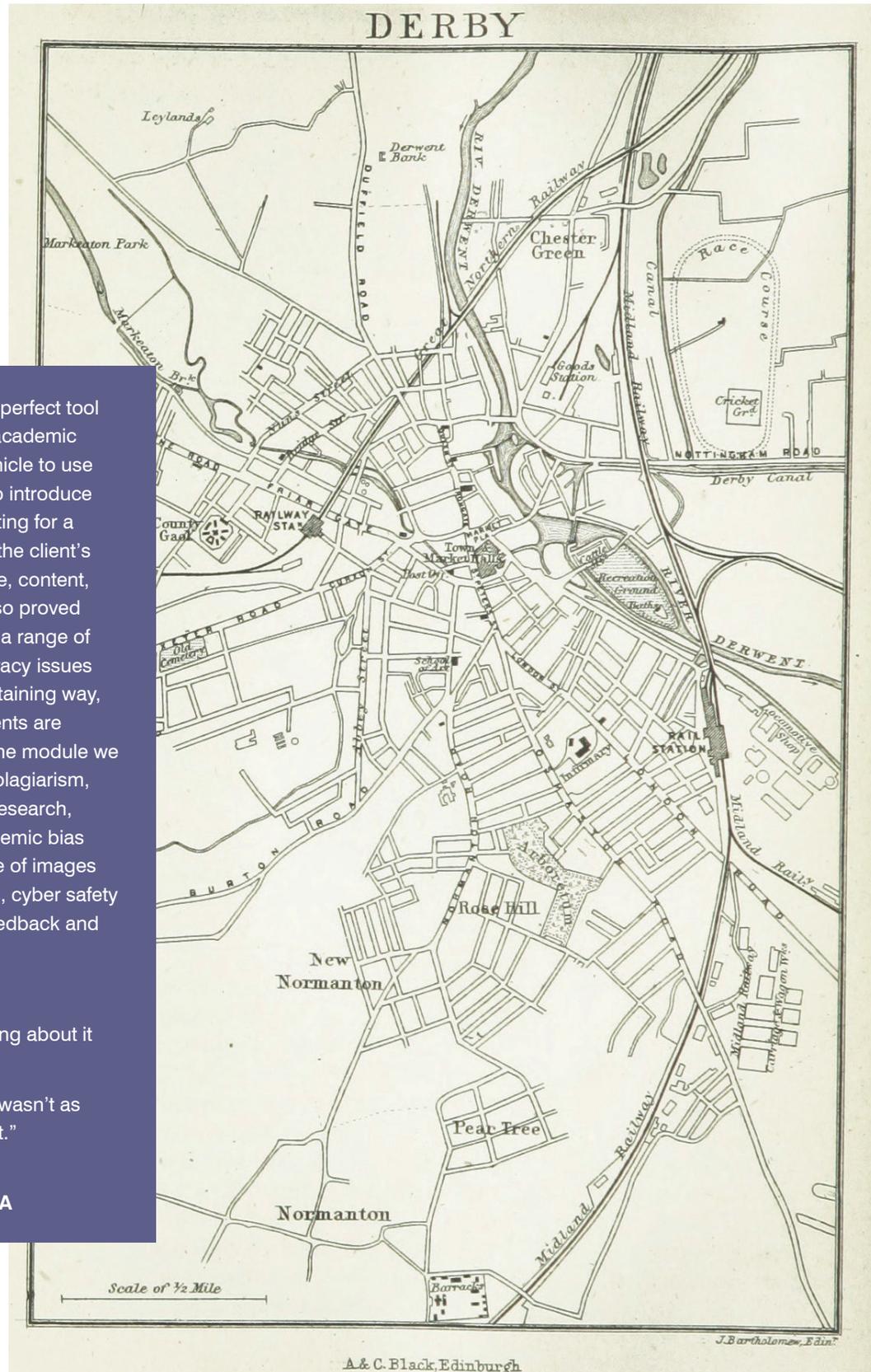
EW(1884)p.500-Derby-A+C Black(pub). Image taken from "Black's Road and Railway Guide to England and Wales" (14th edition). Public domain via Wikimedia Commons.

The Benefit of a Wikimedian in Residence

If you would like to discuss how a Wikimedian might work in your own organisation, contact education@wikimedia.org.uk

Wikimedia UK supports Wikimedians in Residence in a wide range of institutions including galleries, libraries, museums, and archives (GLAMs). Wikimedia UK also works with a wider range of partners in the education sector across the UK, including a number of universities – but the University of Edinburgh was the first to host a Wikimedian in Residence who worked across the entire organisation. They should not be the last.

Having a Wikimedian on staff, and placed in a part of the university which allows them to work across a number of departments and with a range of students, staff and members of the public, dramatically increases the impact on, and benefit to, the organisation from the post.

A Wikimedian can act as support for course leaders. They can be a crucial interface between the Wikimedia community and the university community, and a key tool in bringing those two groups together. They can be trainers, and they can be advocates – both internally and externally. They can be a driver for change and a focus for activity. They can support organisational aims such as a commitment to information literacy, digital skills and sharing collections.

At the University of Edinburgh, the role of the Wikimedian in Residence is to work with course teams and students across the university, to demonstrate how learning to contribute to Wikipedia can enhance staff and students' understanding of how knowledge is constructed, curated and contested online. Editing Wikipedia also provides valuable opportunities for students to develop their digital research and communication skills, and enables them to make a lasting contribution to the global pool of open knowledge.

In addition to providing educational opportunities, the University of Edinburgh residency supports a number of key institutional missions, including: open knowledge and open science; the Scottish Government initiative on creating a data literate workforce; and public and community engagement. The residency provides opportunities for the University of Edinburgh to expand its civic mission, through new forms of collaboration with city-wide and Scottish national bodies.

A significant remit of the University of Edinburgh's residency has been to support the institution's commitment to gender equality including the Athena SWAN (Scientific Women's Academic Network) charter. Many of the editathons facilitated by the Wikimedian in Residence focus on addressing the under representation of women on Wikipedia and encouraging more women to become editors. A 2011 survey (**https://commons.wikimedia.org/wiki/File:Editor_Survey_Report_-_April_2011.pdf**) showed that around 90% of English language Wikipedia editors were male. Since then Wikimedia has made a concerted effort to improve the gender diversity of its community, however women editors are still a minority. In contrast, 69% of participants at University of Edinburgh editathons are women.

(The text in paragraphs 4-6 is issued under a CC-BY-SA licence to Jisc, Sero HE and University of Edinburgh).

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"A Wikimedian in Residence is a changemaker and a facilitator to help organisations become more open and work better with Wikimedia. A residency can transform public engagement with the host organisation's collections, and deliver increased reach and impact of the knowledge and content held by the institution. Their work also impacts internal cultural change, shifting the institution's self-perception to become more open, focused on sharing and engaging rather than keeping their knowledge closed."
Daria Cybulska,
Head of Programmes and Evaluation, Wikimedia UK

Embedding Wikimedia assignments

Monitoring progress

The Programs & Events Dashboard is an easy to use platform for engaging your students, monitoring their activity, and helping to structure any Wikimedia assignment. The tool requires no prior knowledge, it automatically updates with course-related statistics and has useful additional features such as self-directed training libraries and the authorship highlighting tool.

The Dashboard can be found here:
https://outreachdashboard.wmflabs.org/

International Women's Day 2019 - Women of Edinburgh Wikipedia editathon by Jackie Aim, University of Edinburgh. CC-BY-SA 4.0 via Wikimedia Commons.

Integration

There are several avenues available for integrating Wikimedia editing into your course programme. This can include:

- Swapping out existing, similar modules for modules focusing on Wikimedia engagement with similar learning outcomes.

- Organising a one-off, or a series of workshops, teaching students Wikimedia editing in the context of their course.

- Assigning/providing an option of Wikimedia engagement as part of student coursework.

Assessment

When engaging with Wikimedia in the Classroom for the first time, course leaders are often unsure what assessment method to use, as their course cohorts will be contributing content to a live and editable space on Wikipedia.

There isn't just one way of assessing a student's engagement with Wikimedia in an academic setting, but we have found several tried and tested approaches (including the development of rubrics) which have worked well when assessing students' learning development on the course, including:

- Being assigned a particular word count to contribute to Wikipedia.

- Groups working together to each contribute equal word counts to a Wikipedia article, or series of related articles.

- Students being assigned reflective essays or blog posts as an opportunity to evaluate their experience engaging with the Wikimedia projects.

- Course leaders measuring the level and quality of student engagement contributed to the projects (either manually or through the Programs & Events Dashboard).

Next steps

Getting started with a Wikimedia in the Classroom assignment or embedding Wikimedia practices at your institution might seem intimidating at first, however this needn't be the case.

1. Get in touch with Wikimedia UK

Wikimedia UK will be able to direct you to further introductory resources. We may also be able to signpost you to Wikimedia volunteers, where available, or help connect you with existing Wikimedia activity taking place in your area. Contact **education@wikimedia.org.uk**

2. Consider hosting a Wikimedian in Residence

An in-house Wikimedian in Residence can dramatically increase the effectiveness of your engagement with the Wikimedia projects, and the benefit to the organisation. Please contact Wikimedia UK for advice, support and resources if you are considering the creation of a Wikimedian in Residence role in your institution.

3. Make the most of the existing tools and materials

Resource development and method documentation is at the heart of the collaborative Wiki way of working. There exists a large array of resources out there, created to assist first time Wikipedia editors and Wikipedia in the Classroom course leaders.

The most reliable resources we can recommend are The Programs & Events Dashboard training libraries and The Wikimedia Foundation's Outreach For Educators resources. Visit **outreach.wikimedia.org/wiki/ Education/Resources/Overview**

> "Hosting a Wikimedian in Residence (WiR) in a university has real potential to target empowerment in learning technology. If you put your Wikimedian alongside your digital skill trainers and learning technologists, their impact can be significant."

Melissa Highton,
Assistant Principal Online Learning, University of Edinburgh

Text by Ewan McAndrew (Wikimedian in Residence at the University of Edinburgh), Dr Sara Thomas (Scotland Programme Coordinator, Wikimedia UK) and Wikimedia in the Classroom contributors.

Get in touch
education@wikimedia.org.uk