CHAPTER 3

WHERE HISTORY MEETS MODERN: AN OVERVIEW OF ACADEMIC PRIMARY SOURCE RESEARCH-BASED LEARNING PROGRAMS AGGREGATING SPECIAL COLLECTIONS AND WIKIMEDIA

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Abstract

At Maastricht University Library, the use of literary sources from its Special Collections by students is promoted and facilitated through the development and organization of specialized research-based learning programs as part of the Wikipedia Education Program. The central aim of these learning programs is to educate students on the social relevance of the Special Collections, such as the Jesuit library, which contains books (on philosophy, history, anatomy, literature, theology, law, and various social sciences) dating back to the beginning of the sixteenth century. In addition, by participating in these programs, undergraduate students from various colleges are given the opportunity to develop their information literacy skills by gaining experience in conducting empirical literature research on primary historical sources and its publication through a popular open-access platform. Evaluations from students indicate that the unique combination of

analyzing historical literature and the publication of their review on a modern open-access platform led to increased motivation, readership, sense of responsibility, and understanding about the importance of open-access knowledge transfer and valorization of information. In addition to the Wikipedia Education Program, Maastricht University has also been involved in a noneducational Wikimedia project: Wiki-Wetenschappers. The aim of this chapter is to provide an overview of the activities, approaches, and evaluation of the Wikipedia Education Program and the Wiki-Scientists project at Maastricht University.

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Introduction

In recent years, several Dutch universities have been collaborating with Wikimedia Nederland on educational activities as part of the *Wikipedia: Benelux Education Program*. This program is part of a worldwide initiative that encourages academic teachers and students to share their knowledge by contributing to Wikipedia and Wikimedia projects. For example, in 2017 undergraduate students from Utrecht University wrote articles about manuscripts held by the library as part of the minor *Discovery of the Middle Ages: From Parchment to the Internet*. In 2019, students from the University of Amsterdam wrote articles about Dutch or Flemish book printers, publishers, cartographers, and engravers as part of the course *Old Books in a New World*. When developing and implementing these programs, universities often ask for support from experienced Wikipedia editors or the local Wikimedia associations if they want to organize projects or activities. The general

mission of this collaboration is to make free, online educational content accessible everywhere.

With two courses and a research project, Maastricht University has been most prolific in its collaboration with Wikimedia Nederland. Alongside the regular curriculum, ambitious and motivated students of Maastricht University can participate in three excellence programs: *Maastricht Research Based Learning (MaRBLe)*, *Honours+*, and *Premium*. The aim of these excellence programs is to offer students extracurricular opportunities that help them to develop their talents, increase their knowledge, and strengthen their resume. Currently, more than 500 students participate in these programs each year (*Excellence Education*, *2020*).

The MaRBLe program is offered to third-year undergraduate students during the elective period in order to provide hands-on experience in conducting multidisciplinary scientific research. The number of credits varies from 15 to 18 ECTS,[1] depending on the college that organizes the course. Second- and third-year undergraduate students can enroll in an Honours+ program for additional lectures and projects in order to develop academic skills, expand their knowledge, and build community. Students receive 5 ECTS if they successfully complete the course. Premium is an excellence program for graduate students to additionally work on a three-month group assignment with personal coaching, aiming to bridge the gap between the students' academic and professional life.

Since 2014, Maastricht University Library has been collaborating with Wikimedia Nederland in the development of several educational programs. The first program developed was the MaRBLe course *On Expedition* at the Faculty of Arts and Social Sciences (FASoS). In 2017, the *Honours+* elective course *Historical Book Review* was introduced at the Faculty of Psychology and Neuroscience (FPN). The Maastricht University Library has also been collaborating with Wikimedia Nederland on the research project *Opening up old books: Investigating the botanical archives of Maastricht* at the Maastricht Science Programme (MSP), an internationally oriented Liberal Arts and Sciences program of the Faculty of Science and Engineering (FSE).

Educational Programs

On Expedition

For years now, FASoS students have been participating in the *On Expedition* course. The general aim is to guide students in the selection, analysis, and review of historical travel books from the *Jesuit Library* for their bachelor's thesis. In the first part of this five-month MaRBLe course, students have the opportunity to experience and strengthen their interdisciplinary scholarly research skills through examining literary sources that contain information about trade missions and scientific expeditions and analyzing these sources in terms of identity and concepts such as *othering*, a concept linked to the work of modern theorist Edward Said (Said, 1978). This course consists of lectures, collection tours, presentations, group discussions, skills workshops, and feedback sessions. In 2020, an additional activity was introduced, which consisted of the creation of a vlog series in which one of the students (Hvalić, 2020) shared her thoughts, accomplishments, struggles, and aw-moments throughout the course.

Knowledge valorization or societal outreach is an important aspect of the MaRBLe program. Students present their research results not only to their fellow researchers but also to interested parties outside of the university. They share academic knowledge with nonacademic stakeholders. In the second part of this course, students are given an assignment to disseminate their research results to a wider audience by writing and publishing an article on Wikipedia. Although most students are familiar with Wikipedia, none or only few have experience with creating or editing its content. Therefore, students learn how to write articles for Wikipedia during three instruction classes with a volunteer at Wikimedia Nederland. In the first class meeting, students are introduced to the scope and writing guidelines of the platform; then students start writing their article in a personal Wikipedia sandbox (i.e., a space to experiment with the process of editing Wikipedia). During the second class meeting, students receive feedback on the first draft of their article, which they have to incorporate for the final class meeting. In between the instruction classes, students also receive

online feedback from a Wikimedia volunteer in their sandboxes and on their Wikipedia talk pages (i.e., administration pages where editors can discuss improvements to articles or other Wikipedia pages). After the third and last class meeting, students submit their final draft for review. One week later, the course is finalized in online one-on-one sessions in which the students are taught how to add their articles to Wikipedia. Additional information about this MaRBLe course, including the program, handy links (e.g., tutorials and cheat sheets), guidelines, contact information, and links to contributions, sandboxes, and talk pages are published on a dedicated Wikipedia project page (*FASOS Marble Spring*, 2020). Students are graded on three different outputs: their thesis proposal, a Wiki article on the book of choice, and their bachelor's thesis. All outputs are evaluated with a pass or a fail that is based on peer and individual supervisor feedback, forms, and checklists. A Wikimedia volunteer pays special attention to the structure and encyclopedia-style writing of the Wiki article and the selection and citation of references.

In sum, an important objective of the *On Expedition* course is to encourage students to analyze, write, and present information about literary sources to a global audience using the popular open-access platform Wikipedia. Contributing to Wikipedia gives students a sense of ownership and responsibility for their work that lasts long after the course has ended. In addition, students practice writing from a neutral point of view. The encyclopedia-style writing is challenging as Wikipedia policy states that any material or quotations challenged or likely to be challenged, anywhere in the article, require citations. Strict adherence to referencing and citing primary sources in this course is an academic skill students will benefit from in the rest of their academic career.

Historical Book Review
During the *Historical Book Review* elective course of the FPN Honours+ program, students write Wikipedia articles on original, strange, or unusual psychology (related) books from the Special Collections that were published before 1920. The course consists of five class meetings during which the students are taught how to write a book review

article for Wikipedia. Furthermore, students participate in a guided Special Collections tour, either on location or in the form of a livestream. During this tour, students are shown examples of psychology classics and other collection highlights held by the University Library.

During the first class meeting, students are introduced to the Special Collections and learn how to search for primary sources within these collections using the online library catalog. Students pitch and discuss their book of choice during the second class meeting, followed by a training session in specific discipline database search. During the third class meeting, students are instructed about the scope and writing guidelines of Wikipedia by a Wikimedia volunteer. Students present the results of a deep reading analysis of their book, for example, in the form of an argument map, during the fourth class meeting. In the fifth and last class meeting, students showcase their Wikipedia articles with brief presentations of their book reviews, offering room for peer review and general feedback from the instructors. Following this final meeting, students have time to finalize their Wikipedia book review and add it to their personal sandbox. A Wikimedia volunteer gives feedback via the talk pages. Detailed information about this course is centrally structured in a dedicated Wikipedia project page (FPN Historical Book Review, 2020). Students are graded on two outputs: the presentation of the results of the deep reading exercise and the Wikipedia book review. Since the aim of the Historical Book Review course is to write a book review, special attention is paid to the historical context and layout of the book (e.g., context, time frame, book reception, intro sentence, and headers).

Opening Up Old Books

Opening up old books: Investigating the botanical archives of Maastricht is an intermediate-level research project within the MSP of the FSE. In this project, students study historical plant books from the Special Collections. During this four-week, full-time project, students are asked to analyze historical botanical books in the context of contemporary science. The aim of this project is to conduct a comparative analysis between the contents of an interesting, important, or peculiar

book from plant biology and current knowledge on the book's topic. In addition, students write a book review article for Wikipedia. At the end of this course, both the outcome of the comparative analysis and the book review are published on Wikipedia.

In January 2019, thirteen students participated in this new project, which was developed by an evolutionary biologist from the FSE, the University Library, and a Wikimedia volunteer. During this course, the students worked on a comparative analysis of four botany textbooks from the Special Collections dating from the nineteenth to the twenty-first century, resulting in a forty-five-page report. At the start of the project, the students formed three groups; each group selected a post-Linnaean botanical book from the Special Collections, the oldest one dating back to 1821. Students used a personal Wikipedia sandbox for writing sections of the book review and then merged their individual contributions using a group sandbox. After having completed this merger, a Wikimedia volunteer provided in-depth feedback, with a focus on meeting the Wikipedia quality standards and layout guidelines. All the Wikipedia articles have a similar structure: short introduction, context, content, literary styles, reception and impact, gallery, references, and an info box. Information about the project was published on a dedicated Wikipedia project page (*MSP*, 2019). The instructors assessed the quality of the Wikipedia articles on three levels: contents, referencing, and structure. Grading was done on a Likert-type scale, ranging from very poor to excellent.

A feedback session indicated that it was an interesting experience for everyone involved for several reasons. First, the MSP program was established in 2011 and does not have big historical collections of books to study. They were therefore eager to use books from the Special Collections. Furthermore, the library skills training sessions were evaluated as particularly essential because searching for old books is different from navigating modern literature. Students also indicated that they were excited and eager to physically touch and browse through these old, historical, literary sources and that they really got an understanding about how knowledge evolved. For example, they had great fun laughing at the idea that bacteria were once thought to be plants.

In conclusion, all students were highly motivated by the combination of discovering and examining old books, learning about Wikipedia, and improving their literature search skills. All students passed the project with high results.

Impact in and beyond the Classroom

The collaboration between college staff (teachers, researchers), university library employees (curators, information specialists), and Wikimedia volunteers resulted in engaging and comprehensive courses. Evaluation of these courses suggests a valuable impact on multiple levels, both inside and outside the classroom. An important aim for the developers of these courses was to improve the academic information literacy skills of students, such as searching and analyzing historical information sources, communicating academic knowledge to a public audience, practicing encyclopedia-style writing, and referencing and citing literary sources. Surprisingly, practical implementation and hands-on experience with these courses suggest that the realized impact was much broader.

An additional impact of these courses relates to a unique element that differentiates them from other academic courses: the course results in the publication of the student's work on an open-access platform. For many students, this is the first time that they expose and demonstrate their academic knowledge and skills to a general audience. Feedback from the students indicates that the prospect of this outcome results in increased motivation, readership, and a sense of responsibility and ownership for "their" Wikipedia article throughout the course. Students also indicate that this course contributed to their understanding about the importance of open-access knowledge transfer and valorization of information. For example, by contributing high-quality, scholarly articles to Wikipedia they can contribute to a positive image of Wikipedia as a legitimate information source freely accessible to everybody in the world. The hands-on experience of contributing to these processes resulted in a feeling of personal gratification and proudness.

In addition to the actual course activities, the library contributed by scanning the images and other relevant information from the books

students selected. All of the public domain images that were scanned for these courses are accessible on Wikimedia Commons. By doing this, visibility and usability have increased. This shows in the analytics of file usage in other Wikis. Images that are still under copyright are listed to be undeleted when they become public domain. Maastricht University Library recently decided that all scanned, copyright-free images from the Special Collections should be available on *Wikimedia Commons* (2020), and in Wikidata as Linked Open Data.

Limitations and Future Recommendations

Although evaluation of the Wikipedia Education Program courses suggests a valuable impact on multiple levels, there are also areas of improvement. First, past experiences in the course Historical Book Review indicate that many students struggle with finding relevant information about the historical context of the book. Students tend to primarily search for references and texts directly linked to the book title. Future courses should focus on training students to find relevant information that is not directly linked to the book title. Second, some of the articles written by the students remain unpublished. The final draft of an article is generally graded when it is still in the student's sandbox. Sometimes only a few minor adjustments have to be made in order to publish the article. For future courses, it is paramount that all articles are published if they meet the course criteria and Wikipedia's policies and guidelines. Third, not all the books or authors students selected are suitable for a Wikipedia article. Some books are relatively unknown and did not receive a lot of media attention. The effort and time students invested in researching these books is not always visible. Future courses could benefit from identifying poorly covered topics and contribute to filling Wikipedia's knowledge gaps. Last, not so much an area of improvement as an observation, these courses and projects fit better with smaller classes. Maastricht University uses a problem- and research-based learning approach working in small groups of ten to fifteen students. In bigger classes it is difficult to monitor students' work and provide feedback. Universities with a more traditional mode of learning should take this into account.

Noneducational Wikimedia Project

The Wiki–Scientists Project

From late 2018 to October 2019, Maastricht University participated in the *Wiki-Scientists project* (translated from Dutch; *Wiki-Weten-schappers*, 2019) of the *Dutch Foundation for Academic Heritage* (SAE). The SAE is a network of Dutch universities that supports these universities' heritage and cultural collections. With the *Wiki-Scientists project* the SAE aimed to construct a publicly and centrally accessible overview of biographical information on Dutch professors and prominent scientists. Currently, four Dutch universities have an online Album Academicum, but a national overview did not yet exist. With the construction of this overview, the SAE wished to meet the need for a central access point to the distributed information sources held by the various Dutch university libraries and heritage institutions. In order to obtain this goal, it was proposed to collect all available biographical information of prominent Dutch scientists since 1575 and enter them into Wikidata. Furthermore, the intention was to construct this database in such a way that it could be optimally used and easily accessed by a general audience. In order to achieve the goals of the *Wiki-Scientists project*, two Wikimedians-in-residence were appointed. They made the biographical data structurally available on Wikidata.

At Maastricht University, data of all deceased professors has been processed, mapped, and linked to existing items in Wikidata, including first and last name, profession, date/place of birth, date/place of death, sex/gender, education and university, employer, position, and academic degree. All professors received a persistent identifier and all items have been assigned one or more citations. If possible, data is linked to the Virtual International Authority File (VIAF). The list is periodically updated by bots. Information and a current overview of Maastricht professors is available on Wikidata and the renderings of the Maastricht project data in Scholia (*Scholia: Maastricht University*, 2020). By participating in the *Wiki-Scientists project*, we have been able to contribute to a visible, usable, and sustainable heritage of prominent scientists in the Netherlands.

Conclusion

In recent years, the love-hate relationship that teachers and researchers had with Wikipedia is changing for the better. More and more academics see the benefits of Wikipedia, Wikidata, and other Wikimedia project websites. With the collaborations and projects described in this chapter, Maastricht University Library has contributed to a better understanding of how Wikipedia and Wikidata can be deployed within an academic context and what the advantages are for students and others interested in contributing. Maastricht University Library serves as an inspiring example for other teaching librarians in the Netherlands. In the years to come, the library will continue its collaboration with Wikimedia Nederland as part of the Wikipedia Education Program, for the three courses described above, and for new courses with a focus on legal history, medical history, and the history of science. Furthermore, Maastricht University Library aims to provide better access to its collections by optimizing object registrations in line with innovative developments based on linked, open-access data. The library has recently started a pilot project to link its Golden Age of Illustration data to Wikidata. These courses, projects, and initiatives are in line with the library's long-term ambition to contribute to building an extensive digital infrastructure in the form of a sustainable distributed digital network, based on linked (open) data.

Note

1 ECTS is an abbreviation for European Credit Transfer System. One ECTS is equal to twenty-eight hours of study.

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