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Open educational practices with Wikipedia: a scoping review.

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Abstract

Context: Over the last two decades, there has been a growing recognition of Wikipedia's role in education, transitioning from a debated information source to an accepted educational tool. The current study systematically examines the existing body of research on Wikipedia's role as an Open Educational Resource (OER) and an open educational practice (OEP) in higher education. **Method:** A scoping review methodology was adopted. A comprehensive search was conducted across English and French language databases, covering literature from 2006 to 2023. The review followed the PCC (Participants, Concept, Context) criteria and involved a two-stage iterative process of data extraction and analysis. A total of 322 publications were selected for detailed analysis. **Results:** More than three quarters (77.3%) of the corpus present empirical research, while 22.5% consist of theoretical or conceptual studies on the role of Wikipedia in higher education. Literature reviews account for only 2.2% of the total corpus. The main empirical approaches used are narrative research (23.7%) and surveys (23.3%). Other approaches include evaluation research (10.8%), development research (10%), case studies (9.2%) and qualitative description (9.2%). The analysis of the empirical papers revealed that research on Wikipedia's use as OEP has increased significantly since 2015, surpassing studies focused on its use as OER. Undergraduate students are the most frequent participants, with 55% of OEP-related research targeting this group. The study identified trends across academic disciplines, with Humanities and Social

Pudelko, Béatrice; Simard-Tozzi, Geneviève; Régnier, Dominique; Croteau, Sophie; Léonard, Naomie et Bousquet, Nathalie-Eve (2024). Open educational practices with Wikipedia: a scoping review. Dans *Leading the Future of Learning - Overview of papers as presented during the Innovating Higher Education Conference 2024 23-25 october, Limassol, Cyprus*. (p. 297-310). Limassol, Chypre : European Association of Distance Teaching Universities & Open University of Cyprus. ISBN 9789079730506 [r-libre/3533]

PRE-PRINT

Sciences most frequently engaging with Wikipedia as OEP, while STEM fields showed lower engagement. **Conclusion:** This scoping review is the first to provide a comprehensive overview of peer-reviewed publications on the utilisation of Wikipedia as an (OER) and as (OEP) in higher education. It can serve as a foundation for more in-depth and specialised investigations into both aspects of Wikipedia as a tool for open pedagogy in higher education.

Keywords: Wikipedia, higher education, open educational resource, open educational practice, open pedagogy, scoping review.

1. Introduction

1.1. Open Education : from OER to OEP through open pedagogy.

The evolution of the contemporary Open Education movement commenced with an emphasis on Open Educational Resources (OER) and has since expanded to encompass Open Educational Practices (OEP). This is not a novel concept, as open education has its origins in open pedagogy, which places emphasis on fundamental values such as autonomy, freedom, democracy and participation (Paquette, 1979).

Educational Resources (OER) are teaching, learning, and research materials that are either in the public domain or made available under an intellectual property license, allowing for free use and modification by others. In line with Wiley's (Wiley, Bliss, & McEwen, 2014) 5R framework, UNESCO (2019) defines OER as "teaching, learning, and research materials in any format and medium that reside in the public domain or are under copyright but have been released under an open license, permitting no-cost access, re-use, re-purpose, adaptation, and redistribution by others."

The broad definition of OER as freely accessible resources for educational purposes is particularly valuable, as it encompasses any open resource that can be used for educational purposes, even if it was not originally created with the intent of teaching—such as Wikipedia. As the use of OER expanded, discussions shifted towards open practices, emphasizing the open sharing of not only content but also teaching and learning processes. This led to a revival of the concept of open pedagogy, now intertwined with ideas like open licenses, and focusing on knowledge as co-constructed and socially contextualized. This approach is inextricably linked to the social justice paradigm, with the objective of enhancing the accessibility of education and empowering students to assume the roles of both consumers and creators of knowledge.

Scholars such as Cronin (2017) posit that OEP includes the creation, utilisation and repurposing of OER, but extends beyond this to encompass the promotion of pedagogical practices that engage students in peer learning, knowledge creation and empowerment. This more expansive conceptualisation of OEP prioritises the process of learning, viewing openness as a means of fostering active learner participation and collaboration. The move towards OEP represents a shift from viewing openness as a property of resources to seeing it as a characteristic of educational processes. OEP is increasingly recognized as a key enabler of quality, access, and

Pudelko, Béatrice; Simard-Tozzi, Geneviève; Régnier, Dominique; Croteau, Sophie; Léonard, Naomie et Bousquet, Nathalie-Eve (2024). Open educational practices with Wikipedia: a scoping review. Dans *Leading the Future of Learning - Overview of papers as presented during the Innovating Higher Education Conference 2024 23-25 October, Limassol, Cyprus*. (p. 297-310). Limassol, Chypre : European Association of Distance Teaching Universities & Open University of Cyprus. ISBN 9789079730506 [r-libre/3533]

PRE-PRINT

innovation in higher education, and part of a larger open education ecosystem, which also includes open access, open science, and open data.

1.2. Wikipedia : the largest open educational resource in the world.

In 2021, the collaborative encyclopedia Wikipedia, the flagship project of the Wikimedia Foundation, celebrated its 20th anniversary (Reagle & Koerner, 2020). The statistics available on the [Wikipedia Statistics page](#) demonstrate the remarkable success of this initiative, which aims to create "the sum of all knowledge" through open participation from anyone with internet access. With over 61 million pages available in 300 languages (and over 6.8 million articles in the English version alone), Wikipedia has become a key reference point for factual information. Wikipedia is frequently the first result returned by Google searches, and its content is also extracted for use in the Google knowledge panel, which provides summaries of searched topics. Furthermore, information from Wikipedia is used worldwide to power voice assistants such as Google Assistant, Apple's Siri, and Amazon's Alexa. It has also been used to train large language models, including ChatGPT. In light of the pervasive use of Wikipedia among students, it can be regarded as the preeminent open educational resource globally. Its content is published under an open license (CC-BY) that permits free access, utilization, adaptation, and redistribution without constraints. Indeed, since its inception in 2001, the encyclopedia has played a pivotal role in the movement advocating for broad free access to information in the form of open resources for teaching, learning, and training, alongside initiatives such as Open Courseware.

1.3. Wikipedia, Open Pedagogy and Open Educational Practices.

The perception of Wikipedia in higher education has undergone a significant transformation over the past two decades. Following an initial period of scepticism regarding its value as a source of information, attitudes have undergone a significant transformation. Despite initial reluctance from higher education institutions (Ejikman, 2010), the potential of Wikipedia for OEP, within the paradigm of open pedagogy, has been increasingly acknowledged. McDowell and Vetter (2022) observe that educators and librarians are now actively incorporating Wikipedia into their OEP initiatives. This may entail using student contributions to improve encyclopaedia articles or organising community-led edit-a-thons to improve specific topics. In the context of higher education, the utilisation of Wikipedia as an OEP instrument encourages the collaborative construction of knowledge, empowering students to engage with content in a critical manner and contribute to the global knowledge base, thereby transforming their role from that of a consumer to that of a creator of knowledge. Recently, there has been a growing interest in utilising Wikipedia within OEP framework for critical, feminist and social justice initiatives (Bali, Cronin & Jhangiani, 2020). The participatory model of Wikipedia aligns with the core principles of open pedagogy, which encourage collaboration, agency and a commitment to the democratisation of access to education and information.

Nevertheless, there is a paucity of research examining the intersections between Wikipedia as an OER and its utilisation in OEP (McDowell & Vetter, 2022). Notwithstanding the recognition of OER as a multidimensional concept with fluid boundaries, recent comprehensive reviews of OER omit Wikipedia from their discussions (Cronin & MacLaren, 2018; Ehlers, 2011; Koseoglu & Bozkurt, 2018; Nascimbeni & Burgos, 2019). Furthermore, although there is a growing corpus of research on the utilisation of Wikipedia in higher education, few comprehensive reviews have been conducted to provide an overarching picture of the field (Konieczny, 2016;

Pudelko, Béatrice; Simard-Tozzi, Geneviève; Régnier, Dominique; Croteau, Sophie; Léonard, Naomie et Bousquet, Nathalie-Eve (2024). Open educational practices with Wikipedia: a scoping review. Dans *Leading the Future of Learning - Overview of papers as presented during the Innovating Higher Education Conference 2024 23-25 October, Limassol, Cyprus*. (p. 297-310). Limassol, Chypre : European Association of Distance Teaching Universities & Open University of Cyprus. ISBN 9789079730506 [r-libre/3533]

PRE-PRINT

Maggio et al, 2020; Mesgari et al, 2015; Smith, 2020). The precise nature of the research being conducted on Wikipedia in higher education, particularly in relation to its role as both an OER and an OEP, remains unclear.

In light of Wikipedia's pivotal position within the open education ecosystem, it is imperative to gain a comprehensive understanding of how it is being utilised to implement the tenets of open pedagogy in higher education. Furthermore, given that Wikipedia is based on asynchronous and collaborative writing technologies, this knowledge is particularly relevant in the context of distance learning in higher education. This is especially true given that, like distance education, Wikipedia's ultimate aim is to democratise access to education and knowledge.

2. Research question and aims

The overarching research question guiding this study is to examine the extent and nature of existing research on Wikipedia, with a particular focus on identifying the key characteristics of studies examining its use in higher education. The overarching objective is to present a comprehensive overview of academic research examining the perceptions and applications of Wikipedia in higher education teaching and learning. In this paper, we concentrate on the perceptions and applications of Wikipedia as an OER and as an OEP. The specific aim is to delineate the principal characteristics of research on open pedagogy with Wikipedia in higher education.

3. Method

A scoping review was deemed the most appropriate methodology for providing a comprehensive overview of a potentially large and diverse body of literature, particularly given the complexity and heterogeneity of the topic. The review was conducted in accordance with the framework set forth by Arksey and O'Malley (2005), refined by Levac et al. (2010), and further enhanced with recommendations from Tricco et al. (2016) to address specific challenges in ensuring systematic rigor and replicability within a collaborative process.

The research team comprised the principal investigator (BP) and five successive research assistants (DR, SC, GST and NEB). The review was conducted in accordance with the five of the six stages outlined by Levac et al. (2010). The process involved the following five stages: (1) identifying the research question, (2) identifying relevant studies, (3) screening and selecting studies, (4) mapping the data, and (5) collating, summarising and reporting the findings. The sixth stage, stakeholder consultation, will be conducted in collaboration with Wikimedia Canada in the future.

In order to enhance the scope and systematicity of the review, the process of searching (stage 2), selecting (stage 3) and mapping (stage 4) data was conducted in two iterations. The initial iteration was conducted between January 2018 and March 2021 and included iterative refinement loops at stages 1, 2 and 3 (BP, DR, NL, SC). The second iteration, which aimed to update the sources, took place between July 2021 and September 2023 (BP, GST, NEB). During this period, significant refinements were made to the analysis grid used in Stage 4, which resulted in the recoding of the entire corpus. The final mapping of the sources was completed in December 2023 by the principal investigator (BP), with assistance from GST and NEB.

Pudelko, Béatrice; Simard-Tozzi, Geneviève; Régnier, Dominique; Croteau, Sophie; Léonard, Naomie et Bousquet, Nathalie-Eve (2024). Open educational practices with Wikipedia: a scoping review. Dans *Leading the Future of Learning - Overview of papers as presented during the Innovating Higher Education Conference 2024 23-25 october, Limassol, Cyprus*. (p. 297-310). Limassol, Chypre : European Association of Distance Teaching Universities & Open University of Cyprus. ISBN 9789079730506 [r-libre/3533]

PRE-PRINT

Stage 1: Research question

The Principal Investigator (BP) formulated a broad research question as follows: "What is the extent and nature of research on the use of Wikipedia in higher education?" Following the initial exploratory screening in Stage 2, the research question was discussed with the research assistant (DR) in order to ascertain the scope of the term 'uses'. It was decided that the focus should be narrowed to encompass solely human uses and perceptions, specifically those of students, teachers and librarians, and that non-human factors such as algorithms or information systems should be excluded.

Stage 2: Database search

Due to linguistic considerations, the research was limited to articles published in English and French. In the English language, the following databases were utilised: Education Source (EBSCO), LearnTechLib, Psychology & Behavioral Sciences Collection (EBSCO), and Francis, in addition to the multidisciplinary database Academic Search Complete. In French, the databases CAIRN.info, Érudit, Francis and JSTOR were searched.

A comparable list of keywords was devised for both languages, and the search was executed using Boolean formulas. In English, the search string employed was as follows: The search terms "Wikipedia" and one of the following terms, "Teach*," "Learn*," "Student*," "Academic*," "Pedagog*," "Education," or "Higher Education," were used in combination with one another in the abstract or title of articles. In French, the search string was as follows: "Wikipédia (in abstract or title) AND (Enseign* OR Apprenant* OR Apprentissage OR Étudiant* OR Academique* OR Pédagog* OR Éducation OR Enseignement supérieur) (in text).

To address potential limitations of this strategy, we employed a 'snowballing' technique, whereby reference lists were screened and the 'cited by' function of Google Scholar was utilised to examine the first 50 references. This approach enabled a balance to be struck between breadth and depth of search.

The initial search was conducted using the search terms outlined above and included papers published up to December 2020. Updated search using the same search terms, included publications up to August 2023. At this second iteration, the Medline database was consulted in order to identify studies on the utilization of Wikipedia in the fields of medical education and health sciences. Furthermore, additional studies that had not been identified previously were incorporated during this phase.

All citations were imported into the web-based bibliographic manager EndNote, which was accessible to the research team. Duplicate citations were removed manually and iteratively.

Stage 3: Screening and Selecting Studies

The studies were evaluated according to the PCC framework (Tricco et al., 2016), which established the following eligibility criteria: the studies must focus on the uses and perceptions of Wikipedia (concept), by faculty, students, and library professionals (participants), within the context of higher education (context).

The title and abstract of each citation were independently screened by two reviewers (DR and NL), and any discrepancies were resolved by the third reviewer (BP) during online meetings. In the absence of an abstract, the title was read in full.

Pudelko, Béatrice; Simard-Tozzi, Geneviève; Régnier, Dominique; Croteau, Sophie; Léonard, Naomie et Bousquet, Nathalie-Eve (2024). Open educational practices with Wikipedia: a scoping review. Dans *Leading the Future of Learning - Overview of papers as presented during the Innovating Higher Education Conference 2024 23-25 october, Limassol, Cyprus*. (p. 297-310). Limassol, Chypre : European Association of Distance Teaching Universities & Open University of Cyprus. ISBN 9789079730506 [r-libre/3533]

PRE-PRINT

Studies that did not align with the conceptual framework and focused on human uses and perceptions were excluded. For example, studies evaluating the quality of Wikipedia articles using information systems and algorithms, as well as those analyzing political, sociological, anthropological, linguistic, or psychological aspects of Wikipedia in contexts broader than higher education, were excluded. Due to practical limitations, the review was restricted to peer-reviewed articles and book chapters, excluding monographs, dissertations, theses, preprints, newsletters, and presentations from Wikimedia Foundation events.

In total, the process yielded 322 papers published between 2006 and August 2023.

Figure 1 presents the PRISMA flowchart of the study selection and screening process.

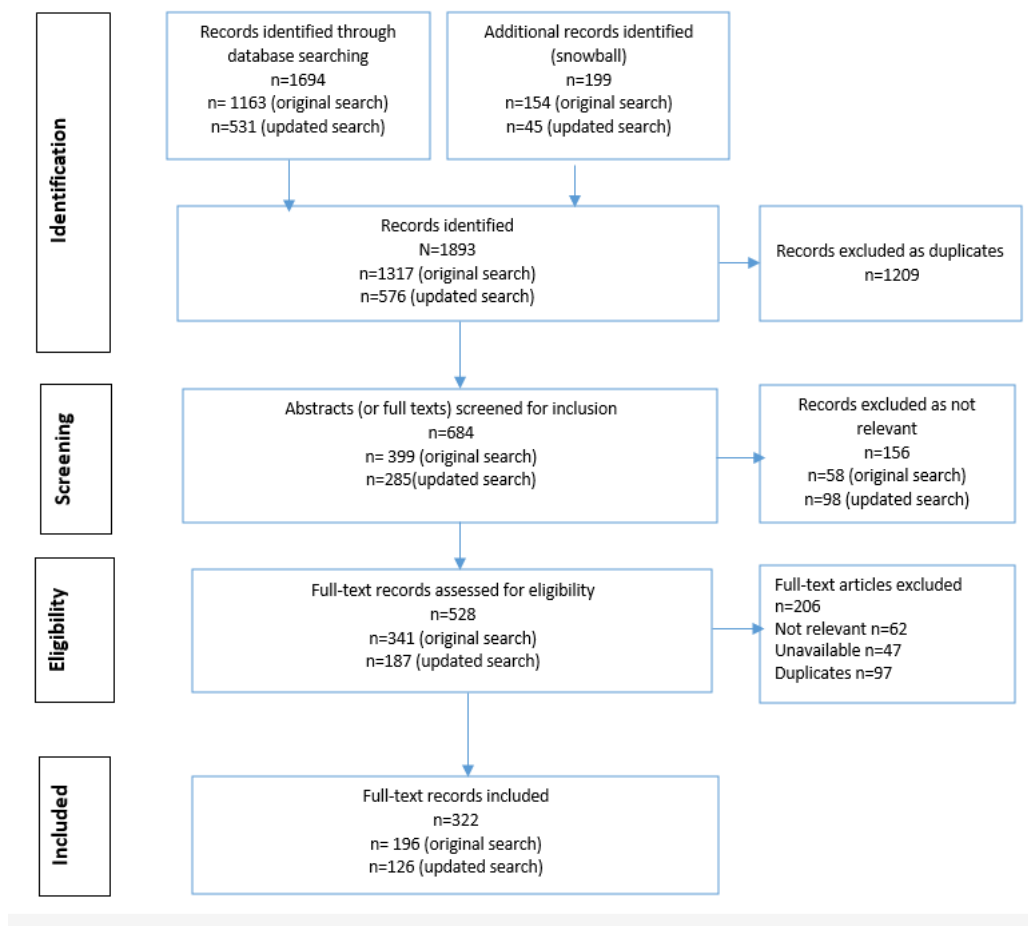


Figure 1: PRISMA flowchart of study selection process.

Stage 4: Data Extraction and Charting

In the first iteration phase, the analytical grid was developed, discussed, and tested by the principal investigator (BP) and two research assistants (DR, SC). The grid was designed to identify the key variables related to the three themes of the PCC framework : participants, context, and concept.

Pudelko, Béatrice; Simard-Tozzi, Geneviève; Régnier, Dominique; Croteau, Sophie; Léonard, Naomie et Bousquet, Nathalie-Eve (2024). Open educational practices with Wikipedia: a scoping review. Dans *Leading the Future of Learning - Overview of papers as presented during the Innovating Higher Education Conference 2024 23-25 October, Limassol, Cyprus*. (p. 297-310). Limassol, Chypre : European Association of Distance Teaching Universities & Open University of Cyprus. ISBN 9789079730506 [r-libre/3533]

PRE-PRINT

In the second iteration phase, the analytical grid was refined and finalised, and this version was employed to recode the entire dataset. The data extraction and charting were completed in December 2023 by the principal investigator and two other research assistants (GST, NEB).

The final version of the analytical grid incorporated elements from the Mixed Methods Appraisal Tool (MMAT) (Hong et al., 2018) to facilitate the extraction and categorization of empirical research types. Countries were coded using the International Standard for Country Codes (ISO 3166), while educational levels and scientific fields were coded in accordance with the International Standard Classification of Education (ISCED) (UNESCO, 2011; 2013). For each record, we extracted the following information: 1. Year of publication, 2. Country where the study was conducted (or the country of residence of the corresponding author if the study was international or the country of conduct was unavailable). 3. Type of paper: theoretical, literature review, or empirical. For empirical studies, additional details were extracted: 4. Type of empirical method. 5. Educational level. 6. Academic field and Academic discipline. 8. Type of learning or teaching activity involving Wikipedia, categorized as either OER or OEP. 9. Perceptions and use of Wikipedia by students, teachers, or librarians.

4. Results

4.1. Overall view

The corpus under examination comprises 322 articles published between 2006 and August 2023. During the initial six-year period following the inception of Wikipedia, the volume of research output exhibited a gradual and consistent growth, increasing from four publications in 2006 to seventeen in 2011. Since 2012, the number of annual publications has remained relatively stable, with an average of 17 to 23 articles per year. Notably, there was a slight increase in 2020, with 35 publications, many of which were empirical studies from North American projects linked to the Wikimedia Education initiative.

In terms of geographical distribution, 163 publications (50%) were authored by researchers based in the United States. Four other countries contributed 10 or more publications, including Canada (22), Australia (19), France (11) and the United Kingdom (10), for a total of 62 publications (19.2%). The remaining 97 publications (30%) were produced by researchers from 38 different countries.

In terms of research focus, more than three quarters (77.3%) of the publications present empirical research, while 22.5% consist of theoretical or conceptual studies on the role of Wikipedia in higher education. Literature reviews account for only 2.2% of the total corpus.

The main empirical approaches used are narrative research (23.7%) and surveys (23.3%). Other approaches include evaluation research (10.8%), development research (10%), case studies (9.2%) and qualitative description (9.2%). Less common methods include mixed methods research (5%), experimental studies (randomised or non-randomised controlled trials, 4.8%) and cohort studies (before and after design, 3.2%).

Regarding academic fields, nearly one-third of the publications (31.3%) were categorized as covering multiple fields or unspecified fields. The Humanities and Arts (23.3%) and Health and Welfare (17.7%) together accounted for approximately 40% of the corpus. These are followed by the Social Sciences (13.7%) and the

Pudelko, Béatrice; Simard-Tozzi, Geneviève; Régnier, Dominique; Croteau, Sophie; Léonard, Naomie et Bousquet, Nathalie-Eve (2024). Open educational practices with Wikipedia: a scoping review. Dans *Leading the Future of Learning - Overview of papers as presented during the Innovating Higher Education Conference 2024 23-25 october, Limassol, Cyprus*. (p. 297-310). Limassol, Chypre : European Association of Distance Teaching Universities & Open University of Cyprus. ISBN 9789079730506 [r-libre/3533]

PRE-PRINT

Sciences (including natural, physical, and computer sciences), which represented 8.4% of the empirical studies. Research was far less prevalent in the fields of Education (4%), Agriculture, Forestry, and Veterinary Science (1.2%), and Engineering, Manufacturing, and Construction (0.4%).

In terms of educational level, almost half of the publications (49.8%) focused on the bachelor or equivalent level. Approximately one-third (37.3%) of the studies were categorized as focusing on multiple fields or an unspecified level of higher education. Research addressing the master's level comprised just 6.8% of empirical studies, while those on short-cycle tertiary education and the doctoral level were scarce, representing 1.2% and 0.8% respectively. Additionally, 4.2% of the publications primarily concerned faculty members engaged in postgraduate or doctoral education.

Of the empirical publications analysed, 52.6% examine how students perceive and use Wikipedia, while 42.8% focus on the perceptions and use of Wikipedia by teachers. Only 3.6% of the studies explore the perceptions and use of Wikipedia by library professionals.

In terms of the type of educational practice under consideration, 40 % of the studies (n=100) describe and analyse the use of Wikipedia as OER, while 60 % (n=149) focus on OEP. Table 1 provides an overview of the results obtained from the analysis of the corpus.

Table 1: General characteristics of included publications.

| Characteristics (All records) | Number (n=322) | Percentage (100%) |
|--|-----------------------|--------------------------|
| Publication year | | |
| 2006-2008 | 22 | 6,8 |
| 2009-2011 | 47 | 14,6 |
| 2012-2014 | 64 | 19,9 |
| 2015-2017 | 58 | 18,0 |
| 2018-2020 | 74 | 23,0 |
| 2021-2023 | 57 | 17,7 |
| Type of research | | |
| Theoretical | 66 | 20,5 |
| Lit. review | 7 | 2,2 |
| Empirical | 249 | 77,3 |
| Characteristics (Empirical studies) | Number (n=249) | Percentage (100%) |
| Method | | |
| Narrative research | 59 | 23,7 |
| Qualitative description | 23 | 9,2 |
| Case study | 23 | 9,2 |
| Survey | 58 | 23,3 |
| Experiment (RTC, NRCT) | 12 | 4,8 |
| Cohort study (Before-After) | 8 | 3,2 |
| Evaluation research | 27 | 10,8 |

Pudelko, Béatrice; Simard-Tozzi, Geneviève; Régnier, Dominique; Croteau, Sophie; Léonard, Naomie et Bousquet, Nathalie-Eve (2024). Open educational practices with Wikipedia: a scoping review. Dans *Leading the Future of Learning - Overview of papers as presented during the Innovating Higher Education Conference 2024 23-25 october, Limassol, Cyprus*. (p. 297-310). Limassol, Chypre : European Association of Distance Teaching Universities & Open University of Cyprus. ISBN 9789079730506 [r-libre/3533]

PRE-PRINT

| | | |
|--|-----|------|
| Development research | 25 | 10,0 |
| Mixed methods | 14 | 5,6 |
| Academic field | | |
| General (covering multiple fields or unspecified field) | 78 | 31,3 |
| Agriculture, forestry, veterinary science | 3 | 1,2 |
| Education | 10 | 4,0 |
| Engineering, manufacturing and construction | 1 | 0,4 |
| Humanities and Arts | 58 | 23,3 |
| Health and Welfare | 44 | 17,7 |
| Sciences (natural, physical, mathematical, computer science) | 21 | 8,4 |
| Social Sciences | 34 | 13,7 |
| Educational Level | | |
| General (covering multiple levels or unspecified level) | 93 | 37,3 |
| Short-cycle tertiary education | 3 | 1,2 |
| Bachelor's or equivalent level | 124 | 49,8 |
| Master's or equivalent level | 17 | 6,8 |
| Doctoral or equivalent level | 2 | 0,8 |
| Postgraduate or doctoral education (typically for faculty members) | 10 | 4,0 |
| Perceptions and use of Wikipedia by | | |
| Students | 131 | 52,6 |
| Teachers | 109 | 43,8 |
| Librarians | 9 | 3,6 |
| Perceptions and uses of Wikipedia as | | |
| OER | 100 | 40 |
| OEP | 149 | 60 |

4.2. Detailed analysis of empirical research on Wikipedia as OER vs OEP.

Evolution of research over time.

The results demonstrate a gradual increase in research on the use of Wikipedia in higher education until 2020, with the exception of a decline in 2014. The year 2020 represents a peak in the number of publications, after which a decline was observed. It is important to note, however, that the data for 2023 is incomplete, as it only includes articles published up to August 2023.

It is worthy of note that research on the utilisation of Wikipedia as OEP has been a prominent feature from the outset. The only years in which research on Wikipedia as OER surpassed that on OEP were 2010, 2011, and 2013. Since 2015, publications focusing on Wikipedia as OEP have consistently outnumbered those on its use as OER, with the exception of 2023, for which the data are incomplete.

Figure 2 presents data on the evolution of research over time regarding the use of Wikipedia as OER versus OEP.

Pudelko, Béatrice; Simard-Tozzi, Geneviève; Régnier, Dominique; Croteau, Sophie; Léonard, Naomie et Bousquet, Nathalie-Eve (2024). Open educational practices with Wikipedia: a scoping review. Dans *Leading the Future of Learning - Overview of papers as presented during the Innovating Higher Education Conference 2024 23-25 october, Limassol, Cyprus*. (p. 297-310). Limassol, Chypre : European Association of Distance Teaching Universities & Open University of Cyprus. ISBN 9789079730506 [r-libre/3533]

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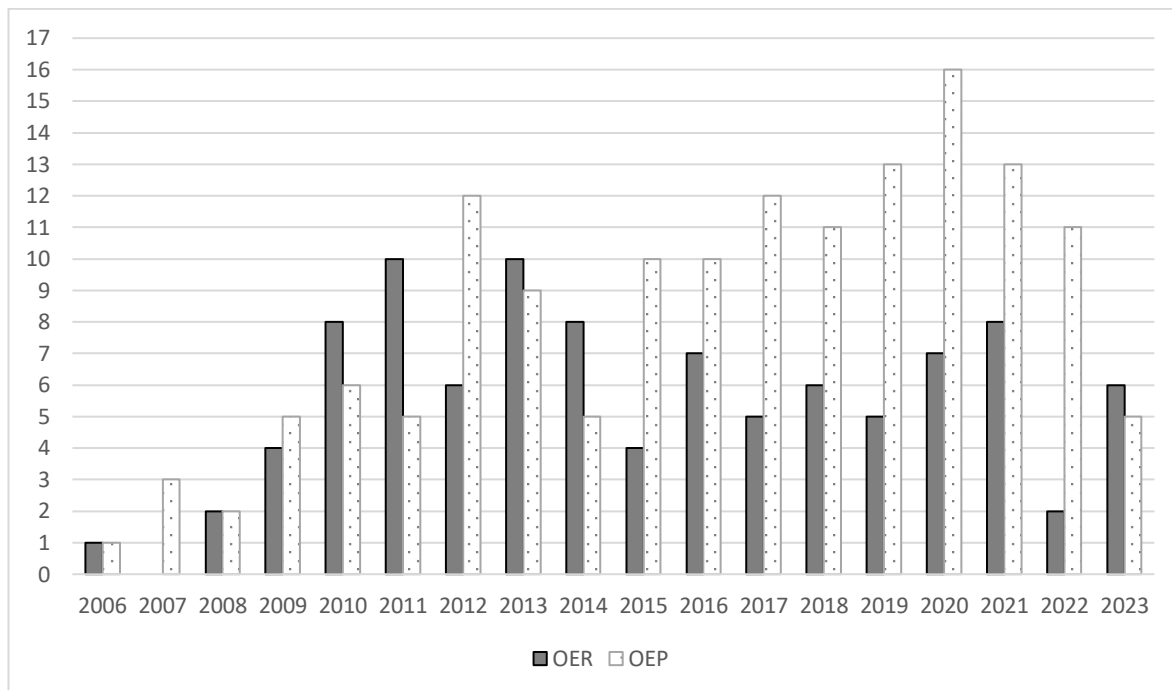


Figure 2: Evolution of research over time regarding the use of Wikipedia as OER versus OEP.

Methods used in research on Wikipedia as OER versus OEP.

Two research methods are used in almost half of the publications on the use of Wikipedia in higher education: narrative research (n = 59) and survey research (n = 58), which account for 23.6% and 23.2% of all empirical publications respectively.

However, the methods used differ depending on whether researchers are interested in Wikipedia as OER or as OEP.

The data show that research on Wikipedia as OER primarily uses the survey method (n = 43), which is the basis for 43% of research on the perception and use of Wikipedia as a information resource. The second method is evaluative research (n = 23, or 23%), which mainly involves assessing the quality of Wikipedia articles, sometimes by comparing them with other academic sources of information in a given field. These two methods account for 66% of research on Wikipedia as OER.

The picture is different for research on Wikipedia as OEP. The dominant research methods here are narrative research (n = 53 or 35,5%), development research (n = 22 or 14,7 %), case studies (n = 21 or 14 %), qualitative description (n = 15 or 10 %) and surveys (n = 15 or 10 %). These five methods are used as OEP in 84,2% of research publications on Wikipedia.

Figure 3 presents data on the methods used in research on Wikipedia as OER compared to OEP.

Pudelko, Béatrice; Simard-Tozzi, Geneviève; Régnier, Dominique; Croteau, Sophie; Léonard, Naomie et Bousquet, Nathalie-Eve (2024). Open educational practices with Wikipedia: a scoping review. Dans *Leading the Future of Learning - Overview of papers as presented during the Innovating Higher Education Conference 2024 23-25 october, Limassol, Cyprus*. (p. 297-310). Limassol, Chypre : European Association of Distance Teaching Universities & Open University of Cyprus. ISBN 9789079730506 [r-libre/3533]

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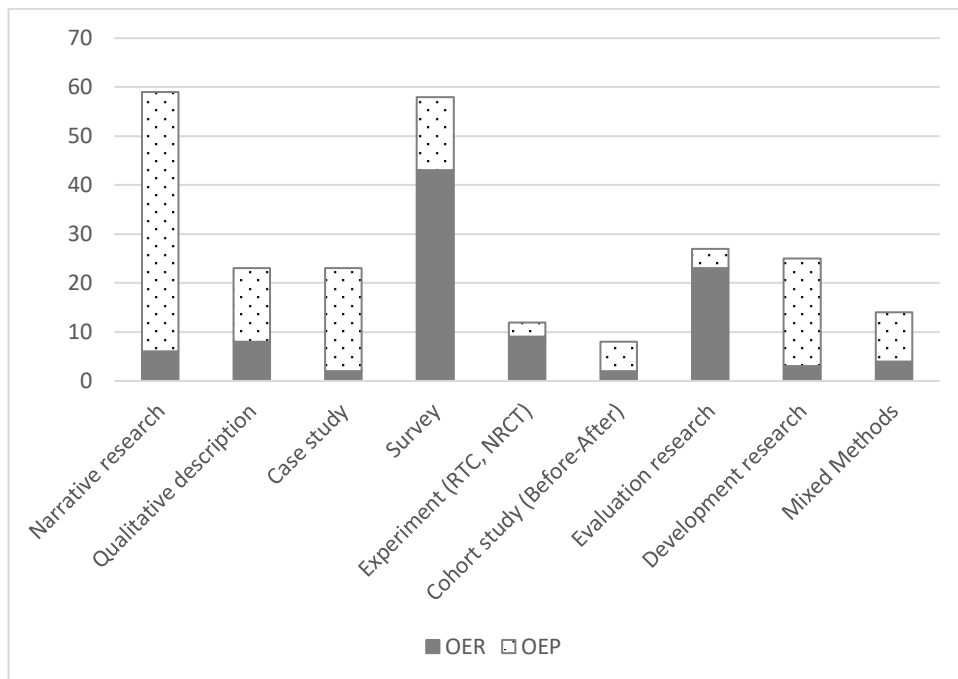


Figure 3: Methods used in research on Wikipedia as an OER compared to OEP.

Educational levels in research on Wikipedia as an OER versus OEP.

Among empirical studies on Wikipedia as OER, 47% (n=47) cover multiple educational levels or do not specify the level. When specified, the majority of research—42% (n=42) focuses on undergraduate students.

In contrast, research on Wikipedia as OEP is predominantly conducted at the undergraduate level, with 55% (n=82) of publications involving undergraduate student projects. Studies that address multiple educational levels or do not specify the level constitute 30.9% (n=46) of these publications.

Very little research has been conducted on OER or OEP with Master’s or equivalent level students, accounting for only 5% (n=5) and 8.1% (n=12) of studies, respectively. Even fewer studies focus on doctoral students: only 1.2% (n=2) of OEP-related publications, and none for OER-related research, explore the perceptions and uses of Wikipedia at the doctoral level.

Figure 4 illustrates the distribution of educational levels addressed in research on Wikipedia as OER compared to OEP.

Pudelko, Béatrice; Simard-Tozzi, Geneviève; Régnier, Dominique; Croteau, Sophie; Léonard, Naomie et Bousquet, Nathalie-Eve (2024). Open educational practices with Wikipedia: a scoping review. Dans *Leading the Future of Learning - Overview of papers as presented during the Innovating Higher Education Conference 2024 23-25 october, Limassol, Cyprus*. (p. 297-310). Limassol, Chypre : European Association of Distance Teaching Universities & Open University of Cyprus. ISBN 9789079730506 [r-libre/3533]

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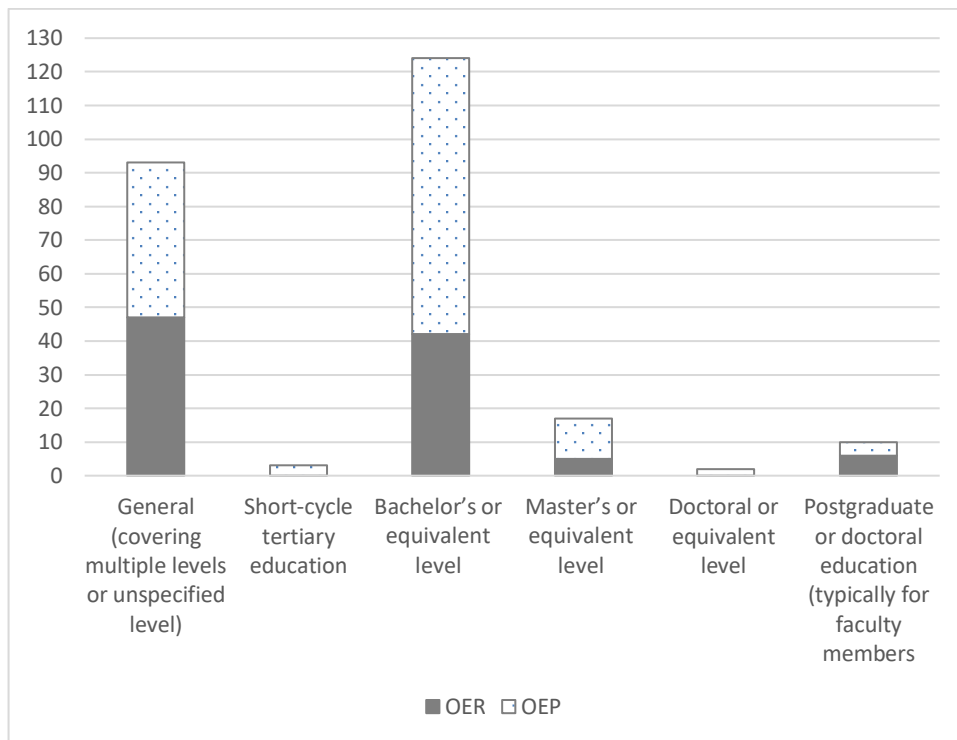


Figure 4: Distribution of educational levels addressed in research on Wikipedia as OER compared to OEP.

Academic fields in research on Wikipedia as an OER versus OEP.

With regard to the academic disciplines represented in the empirical studies, 37% (n=37) of publications on Wikipedia as OER and 27.5% (n=41) of publications on OEP cover multiple academic fields or do not provide sufficient information to specify the academic domain. When this information is available, the humanities and arts lead the way in research on the perceptions and uses of Wikipedia as OEP, accounting for 28.8% (n=43) of all OEP studies. Both the social sciences and health and welfare have an equal representation, with 14.7% (n=22) of OEP-related publications each. The remaining 14.3% of OEP studies are distributed as follows: The remaining fields represented in the empirical studies are Sciences (7.3%, n=11), Education (4.6%, n=7), Agriculture, Forestry, Veterinary Science (1.3%, n=2), and Engineering, Manufacturing, and Construction (0.7%, n=1).

With regard to Wikipedia as OER, the field of Health and Welfare is the most represented, comprising 22% (n=22) of the studies, followed by the Humanities and Arts at 15% (n=15) and the Social Sciences at 12% (n=12). The representation of other academic fields in OER studies is analogous to that observed in OEP: Sciences 10% (n=10), Education 3% (n=3), Agriculture, Forestry, Veterinary Science 2% (n=2), with no research identified on Engineering, Manufacturing, and Construction.

Figure 5 illustrates the distribution of academic fields in research on Wikipedia as OER in comparison to OEP.

Pudelko, Béatrice; Simard-Tozzi, Geneviève; Régnier, Dominique; Croteau, Sophie; Léonard, Naomie et Bousquet, Nathalie-Eve (2024). Open educational practices with Wikipedia: a scoping review. Dans *Leading the Future of Learning - Overview of papers as presented during the Innovating Higher Education Conference 2024 23-25 october, Limassol, Cyprus*. (p. 297-310). Limassol, Chypre : European Association of Distance Teaching Universities & Open University of Cyprus. ISBN 9789079730506 [r-libre/3533]

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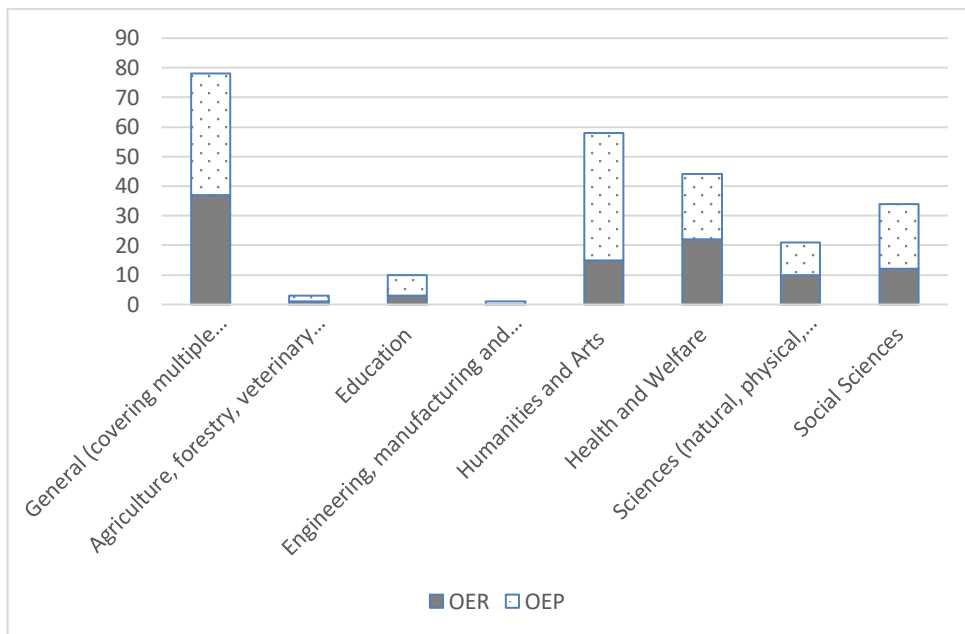


Figure 5: Distribution of academic fields in research on Wikipedia as OER in comparison to OEP.

5. Discussion

The results of this scoping review illustrate that academic research on the utilisation of Wikipedia as OER and as OEP in higher education is both extensive and varied. Furthermore, the findings indicate that studies on Wikipedia as OEP have increased significantly since 2015, exceeding those examining its role as OER. This shift suggests that educators are increasingly aware of the value of engaging students in the process of knowledge co-construction, thereby enabling them to contribute to a public knowledge base rather than merely consuming information. It also demonstrates that over the past two decades, Wikipedia has transitioned from a debated information source to an accepted educational tool.

It is worthy of note that the majority of research in both the OER and OEP contexts is conducted at the undergraduate level. This trend appears to reflect an increasing emphasis on the development of essential academic skills, such as critical thinking and digital literacy, at the outset of students' higher education journeys. However, the paucity of research focused on graduate students, particularly at the Master's and doctoral levels, is surprising, given the expectation that advanced students would have much to contribute to and learn from the knowledge-building process on Wikipedia. Similarly, it may be assumed that, given the rapid evolution of knowledge in all academic fields, advanced students continue to rely on Wikipedia as an OER, albeit in different ways than undergraduate students. It would be beneficial to investigate this matter further and to gain a deeper understanding of the social, institutional, or economic factors that may explain why researchers and educators appear less inclined to promote participation of advanced students in the creation and public sharing of knowledge on Wikipedia.

Pudelko, Béatrice; Simard-Tozzi, Geneviève; Régnier, Dominique; Croteau, Sophie; Léonard, Naomie et Bousquet, Nathalie-Eve (2024). Open educational practices with Wikipedia: a scoping review. Dans *Leading the Future of Learning - Overview of papers as presented during the Innovating Higher Education Conference 2024 23-25 october, Limassol, Cyprus*. (p. 297-310). Limassol, Chypre : European Association of Distance Teaching Universities & Open University of Cyprus. ISBN 9789079730506 [r-libre/3533]

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With regard to the academic disciplines in which Wikipedia is the subject of study, the review findings indicate that it is most frequently used as OEP in the humanities and arts, followed by the social sciences and health and welfare. Conversely, there is a notable dearth of research examining the utilisation and perceptions of Wikipedia in the context of STEM fields and professional disciplines such as agriculture and engineering. These findings may be surprising, given that Wikipedia's editorial guidelines encourages objectivity and a neutral point of view. Consequently, one might have expected these disciplines to be ideal for the sharing of well-established scientific knowledge. This appears to be the case in medical disciplines within the field of health and welfare, where research tends to focus on both the quality of medical information available on Wikipedia and the dissemination of high-quality information.

6. Conclusions

This scoping review is the first to provide a comprehensive overview of peer-reviewed publications on the utilisation of Wikipedia as OER and as a OEP in higher education. The present systematic overview of research conducted over the past 20 years can now serve as a foundation for more in-depth and specialised investigations into both aspects of Wikipedia as a tool for open pedagogy in higher education, focusing on its role as both a resource and a process for knowledge construction, sharing and learning.

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