Wiki-Librarian: A Project to Train Librarians and Students to Work with Wikipedia

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ABSTRACT: Wiki-librarian is a multiyear project to train librarians and students of librarianship and information science to use wiki tools, including writing articles on Wikipedia. The project has existed since the beginning of 2015, and the University Library "Svetozar Marković" and is logistically and financially supported by Wikimedia Serbia. The part of the project that deals with the training of librarians is officially accredited. Moreover, the project has expanded its scope to work with students, as well as with librarians outside the training process, through editathons, digitization of content, participation in other wiki activities such as 1Lib1Ref, Wikipedian in Residence. Project activities were presented at several conferences and partially in several publications. On the one hand, better awareness of librarians of wiki software IT capabilities as well as methods for improved presentation of their knowledge in the digital wiki environment are achieved by this project, while on the other hand these activities significantly increase the textual resources of Serbian Wikipedia and their quality. **KEYWORDS:** Wikipedia, training of

librarians, Wikipedia in education, references on Wikipedia.

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1 Introduction

The online encyclopedia Wikipedia¹ has established itself as an indispensable information resource that seeks to gather and make available widespread knowledge contributed by many people especially in the era that produced Internet as the main medium that connects different parts of the world in real time. Keeping pace with this trend, librarians are modernizing their work and the access to information sources and users. Wiki-librarian project organized by the University Library "Svetozar Marković" from Belgrade and Wikimedia Serbia² was created as an expression of readiness to find the best way that unites Wikipedia and librarians. After several years this project has produced a large number of trained librarians and students of librarianship to work on Wikipedia, which resulted in numerous written and updated articles, posted references, created and digitized photographs, scanned old books.

Since the very beginning of Wikipedia there were questions regarding the attitude of librarians towards Wikipedia. According to the research (Luyt et al. 2010), this attitude was mostly positive. According to (Snyder 2013), librarians are aware of the negative rather than the positive aspects of Wikipedia; therefore they use it more for personal purposes than for research or to help the users. The research (Vetter 2014) describes how music composition students at the University of Ohio used special library collections to create articles for Wikipedia, which increased students' motivation and public awareness of the library resources. The review paper (Okoli et al. 2014) analyzes 99 scientific papers that deal with Wikipedia to some extent and examine the attitude of these works towards Wikipedia readers. Common Wikipedia users include researchers, librarians and students. In (Jemielniak and Aibar 2016) the perception and distrust of the academic community towards Wikipedia are analized while the possible scenarios of peaceful coexistence are stated. The (Faletar Tanacković, Đurđević, and Badurina 2015) paper presents research conducted at the Faculty of Philosophy in Osijek on the experiences and attitudes of students and teachers on the use of Wikipedia in academic environment. It showed that students tend to have better opinion about Wikipedia than teachers do, and that 19.8% of teachers explicitly forbid students from using Wikipedia.

The paper (Kousha and Thelwall 2017) is an interesting study on the citation of Wikipedia articles in scientific papers and monographs. The sam-

^{1.} English Wikipedia, Serbian Wikipedia, accessed July 1st 2021.

^{2.} Wikimedia Serbia, accessed July 1st 2021.

ple included 302,328 scientific papers and 18,735 monographs indexed in Scopus³ for the period from 2005 to 2012. Only 5% of scientific papers had a Wikipedia article among their references, while in the monographs their percentage was 33%. In the review papers, that percentage is 8%. It means that Wikipedia is more used as a as a source in writing books than it is the case with scientific papers.

The (Lewoniewski, Wecel, and Abramowicz 2017) research on 7 major Wikipedias (by number of articles) and over 10 million of their articles showed that a significant number of references are repeatedly referenced on many different Wikipedias. Thus, the English and German Wikipedias had the highest number of common references - 345202, which is understandable because they are the biggest encyclopedias from that collection. If articles presented on at least 5 Wikipedias are taken into consideration, then the highest number of common references was between the English and Russian Wikipedias. According to (Singh, West, and Colavizza 2021) research on a sample of 29.3 million citations from 6.1 million Wikipedia articles in English, it was found that 6.7% of Wikipedia articles cite at least one paper from a journal with an associated DOI,⁴ while Wikipedia cites about 2% of the total articles that are indexed in the Web of $Science^5$ with associated DOI. The (Pooladian and Borrego 2017) study shows lack of standardization while citing references on Wikipedia with data often missing or having errors. That research showed that only 3% of scientific articles from information and library sciences published in the period 2001-2010 were cited on Wikipedia until the end of 2016. The sample included 26542 scientific papers from the category "Information Science and Library Sciences" indexed in the Web of Science.

2 The context of creation of the project

Wikimedia Serbia was founded in December 3^{rd} 2005 as a local chapter of the Wikimedia Foundation.⁶ Its activities are largely focused on cooperation

^{3.} Scopus is a scientific citation database created in 2004; Scopus, accessed July $1^{\rm st},$ 2021.

^{4.} DOI is an abbreviation for "Digital object identifier", used to uniquely identify scientific papers and other digital resources. DOI, accessed July 1st, 2021.

^{5.} Web of Science is a leading scientific citation database; Web of Science, accessed July 1st, 2021.

^{6.} Information on Wikimedia affiliates, thematic organizations, and user groups is available at Wikimedia chapters, accessed July 1^{st} , 2021.

with educational institutions, primarily with colleges but also with the secondary schools. In December 2005, the idea about students getting involved in writing articles on Wikipedia was presented within the seminar at the Department of Computer Science and Informatics at the Faculty of Mathematics, University of Belgrade. The founder and main promoter of this idea was one of the authors of this text, Đorđe Stakić. The idea was realized in the upcoming year after two faculties of the University of Belgrade, The Faculty of Physical Chemistry and The Faculty of Philology took part in the educational activities of Wikimedia Serbia by writing articles on Wikipedia instead of classic seminar papers. The first article posted on Serbian Wikipedia was ENIAC,⁷ dedicated to the first digital electronic computer. It was published by a student of the Faculty of Philology on April 18th 2007 within the course "Internet and Web Technology" held by Professor Cvetana Krstev.

Other faculties and high schools were involved in the further development of the educational program of Wikimedia Serbia. In April 2012, the Academic Board of Wikimedia Serbia was formed as a group of members that focused on the development and implementation of educational activities related to Wikipedia. More details about wiki technology, its development and importance, as well as the pioneering endeavors of the development of the educational program on Wikipedia are available in the paper (Stakić 2009). Research results of students' attitudes towards the use of Wikipedia as a teaching tool performed at the Faculty of Pedagogy in Vranje of theUniversity of Niš are presented in the paper (Stakić et al. 2021). This research was made on a sample of 203 students and it showed that they positively evaluate the use of Wikipedia in teaching and that they prefer writing articles on Wikipedia rather than writing classic seminar papers.

The University Library "Svetozar Marković" in Belgrade was officially opened on May 24^{th} 1926. Today, it is one of the biggest scientific libraries in Southeast Europe with about 1.7 million publications. The training programs for librarians have been implemented within its activities from 2004. These training programs got official accreditation in 2014, see (Popović, Stolić, and Stanišić 2019). The University Library shows a great readiness and will to cooperate with other organizations that are committed to common goals. As part of that cooperation, a panel discussion "Creative Commons - Creativity and the Knowledge Society" was held at the University Library on December 12^{th} 2013, in a joint organization of Wikimedia Serbia and the

^{7.} ENIAC in Wikipedia, accessed July 1st, 2021.

University Library.⁸ Đorđe Stakić held a presentation on "Wikimedia Serbia and the University of Belgrade in the development of open knowledge" and presented the educational program and work of the Wikimedia Serbia Academic Board. Aleksandra Popović and Dragana Stolić held a presentation "Creative Commons, licenses and e-thesis of the University of Belgrade". The panel discussion initiated the idea for the cooperation of the University Library and Wikimedia Serbia in the field of educational programs as well as to design a training program for librarians to work on Wikipedia.

3 Development of the Wiki-librarian project

Following the initial plans and agreements between the University Library and Wikimedia Serbia, the realization of the internal workshop for training of librarians of the University Library soon started. The librarians were the main bearers of future project having in mind that they were responsible for its realization. This training took place on January 30th 2014, in the premises of the library. During the summer of 2014, a Project Proposal for the Wiki-librarian was sent to Wikimedia Serbia which approved funds for its implementation as part of its annual plan for 2015. At about the same time, the project also applied at the National Library for an accredited program of continuous professional development of librarians. The project application was submitted by Aleksandra Popović, Oja Krinulović and Đordje Stakić, as authors of the project, as well as the University Library "Svetozar Marković" and the Faculty of Mathematics of the University of Belgrade as institutions in charge of the project. At the end of the year, the project was officially accredited for 2015. Later on, the project was accredited three more times, for a year (2016), for the two upcoming years (2017-2018) and finally for the three upcoming years (2019-2021). Wikimedia Serbia was also approved for the project for each subsequent year, starting from 2015 to 2021, with the corresponding annual budget which would cover the project costs.

In order to prepare for the project, Wikimedia Serbia organized the first one-month program, Wikipedian in Residence, realized within the University Library in December 2014. Jovana Milošević was a student hired to hold the

^{8.} The agenda of a panel discussion "Creative Commons - Creativity and the Knowledge Society", access date May $30^{\rm th}$ 2021.

workshops for librarians, write new articles, digitize and post photos under a free license, to the Wikimedia $\rm Commons^9$ for this project

The realization of accredited workshops for librarians began in 2015, and it was conducted by accredited lecturers, members and project implementers. The workshops were realized as two-day events with duration of three hours each, and according to the accreditation, they carry a total of 6 points. On the first day, training for work on Wikipedia is realized in the form of lectures and workshops. The second day is about writing and posting articles on Serbian Wikipedia. Librarians are encouraged to prepare material for the article, which is than uploaded and adapted to wiki syntax.¹⁰ An important part of the whole process of writing articles is citing references from relevant sources, which contributes to the verifiability of articles on Wikipedia, that is very common to the librarians. Upon completion of the training, all participants receive certificates, and the results in the form of written articles remain on Wikipedia. In this way, all training participants have a certain benefit and motivation to participate in the project. Having in mind that the topics are open, librarians have the opportunity to write about their libraries, sights from where they come from and else that is relevant to Wikipedia and is over threshold of notability.¹¹ The enriched content of Serbian Wikipedia has thus contributed to higher visibility of libraries in the search engine results, as well as greater affirmation of the librarian profession in general. In this way, the librarians themselves have the opportunity to get to know and connect with each other as well as to get a chance to work on something of greater significance.

Apart from the accredited two-days workshops, for the interested librarians, additional workshops were organized for further training in certain activities, but also to ensure a larger number of written articles. That led to another 7 workshops during 2015. The following activities within the framework of this project were edit-a-thons. They started as live, few hours one-day activities, which gathered the interested participants – librarians who write and post articles on Wikipedia. Experienced librarians were helping the beginners, and in general, the participants were helping each other to manage with the new and less familiar things. Since the activities were organized in

^{9.} Wikimedia Commons is a repository of media files under free licenses; Wikimedia Commons, accessed July 1^{st} 2021.

^{10.} Wiki syntax is the procedure for text marking in the MediaWiki software used on Wikipedia; formatting rules, accessed July 1st 2021.

^{11.} Wikipedia has guidelines on notability; Wikipedia:Notability, accessed July $1^{\rm st}$ 2021.

the Library, the necessary literature was at hand which made the creation of the articles much easier. Three edit-a-thons were organized during 2015: "Open science", "150 years from the birth of Jovan Cvijić" and "Librarians together on Wikipedia". During 2016, two edit-a-thons were organized on the topic "Open access scientific journals" with a total of 4 workshops. Librarians from the journal publishing institutions and representatives from the open-access scientific journals published in Serbia were invited. Since the response was unexpectedly big, the edit-a-thon was repeated with several workshops realized. In that way, Wikipedia became richer for about 60 articles in this field, which significantly contributed to the accessibility of the information about these magazines to a wider circle of readers. During 2017, the edit-a-thon "Open access scientific journals" was repeated through two workshops. The activities continued in 2018, when there were two edita-thons about scientific journals and another one called "My Street". Since a large number of librarians from various cities went through the training, this marathon had a response within many of the previous participants in accredited workshops. For that reason, it was repeated twice in 2019.

Starting in 2016, within the project Wiki-librarian, the University Library also holds an internship for students of Librarianship and information science from the Faculty of Philology, University of Belgrade. This internship is related to the course Digital Text II. Within the internship, students go through trainings, practical workshops, they write articles and in the end, they get points which form the final grade for the Digital Text II course. This is very useful for students to experience the practice of a large and important library such as the University library and get acquainted with the work in the library, with the process "from the inside", as well as with the employed librarians. These are mostly multi-day trainings and result in new articles on Wikipedia.

Starting from 2018, participation in the global 1Lib1Ref¹² campaign was added to the list of above mentioned activities. This campaign exists with purpose to motivate the librarians to contribute professionally to Wikipedia by adding references to the articles. The campaign itself started on January 15th, on Wikipedia's birthday, and lasted for about 20 days. Apart from the librarians, other users are also welcome to participate in referencing in this campaign.

The pandemic in March 2020 affected the activities related to this project. It was no longer possible to organize live workshops for either librarians or

^{12.} The 1Lib1Ref (abbreviated for "one librarian, one reference") global campaign; 1Lib1Ref, accessed July 1^{st} 2021.

students, just as it was no longer possible to have live edit-a-thons. However, that did not stop the activities of the project, which by its nature, managed to adapt and to realize a significant part of the activities online, and in that way achieve the planned metrics. Thus, in 2020, the student internship was realized through sending presentations, brochures and video materials with e-mail consultations, while in 2021 the student training was held online via Zoom,¹³ with subsequent consultations by e-mail. During 2020, three multi-day online edit-a-thons were held: "Serbian humorous-satirical periodicals of the 19th and 20th century", "My street", "Press of my region", as well as the 2021 edit-a-thon "Literature for children". The diversity of these topics contributed to the good response from librarians. During 2020, attention was paid to the digitization of publications within the project, and during 2020 and 2021, a significant part of the activities was related to the global campaign 1Lib1Ref.

4 Achieved results

As part of the Wiki-librarian project, three one-month internship programs within the frame of Wikipedian in Residence were held in December 2014, July 2016 and March 2019. The first internship resulted in 18 new articles on Wikipedia, 102 uploaded photos and 5 scanned books with a total of 4554 pages. During this internship, 8 internal workshops were held in the University Library for 10 employees.¹⁴ During the second internship, 8 books (2585 pages) were digitized and placed on Wikimedia Commons.¹⁵ The third internship contributed with 16 new, 13 supplemented, 13 edited articles, 158 photographs and 10 books (2607 pages).¹⁶

A great number of librarians from different cities in Serbia went through accredited Wiki-librarian workshops. During 2015 and 2016, there were 6 such two-day workshops, which were attended by about 70 librarians per year with approximately as many written or updated articles. During 2017 there were 7 workshops, in 2018 there were three workshops and during 2019 there were four realizations of the accredited seminar. Most workshops were realized in Belgrade, with over 100 librarians attendees. In addition,

^{13.} Zoom is video conferencing software that expanded during the 2020 pandemic; Zoom official website, accessed July 1^{st} , 2021.

^{14.} Details of this internship are available at the website: Details of the first internship, access date July 1^{st} 2021.

^{15.} Details of the second internship, access date July 1st 2021.

^{16.} Details of the third internship, accessed July 1st 2021.

accredited workshops were held in 13 other cities: Užice, Novi Sad, Banja Vrujci, Čačak, Smederevo, Vranje, Valjevo, Leskovac, Obrenovac, Topola, Kragujevac, Jagodina and Kruševac. Holding the workshops in various cities throughout Serbia gave significant contribution to the decentralization of the activities. There were 8 to 19 librarians from 3-17 libraries per each of these workshops outside Belgrade. In these metrics, each library employee that passed the training was titled librarian. According to (Popović, Stolić, and Stanišić 2019), during 2015-2018, a total of 22 accredited Wiki-librarian workshops were held, with a total of 298 participants. During 2019, another 42 participants passed the training through 4 accredited workshops. Taking into account not only the places the seminar was held at, but where the participants were from in general, we come to the number of 39 cities and municipalities in Serbia. The participants of the seminar were from different types of institutions, as shown in Table 1. Apart from these official ones, there were additional workshops for librarians, 7 during 2015, 3 during 2016, and 4 during 2017, 2018 and 2019. Apart from the trainings, the contribution from workshops were updated articles on Wikipedia. Since 2020, as mentioned before, there has been no live workshops due to coronavirus pandemic.

Institutions	Number
Public libraries	34
Archives	2
Museums	6
Schools	15
Societies - associations	11
Higher education institutions	77

Table 1. Data on the number of institutions that attended the Wiki-librarian course from 2015 to 2021

If it was necessary for the participants, workshops and lectures were also held on Wikipedia during the edit-a-thons. Whether the edit-a-thons were held live or online, they resulted in increased number of new and updated articles. The following edit-a-thons were among the most successful:

 "Librarians together on Wikipedia" in 2015, with 44 new and 6 updated articles,

- "Open access scientific journals" in 2016 with a total of 58 new and 1 updated article, while in 2017 there were 25 new and 3 updated articles,
- "My street" in 2018, with 37 new and 1 updated article, while during 2019, 44 new articles were written.

Particularly successful were the multi-day online edit-a-thons in 2020 and 2021, which metrics are:

- "Serbian humorous-satirical periodicals from the $19^{\rm th}$ and $20^{\rm th}$ century": 71 new, 5 updated
- "My street": 59 new, 5 updated
- "Press of my region": 91 new, 6 updated
- "Literature for children": 76 new, 12 updated.

Some of these edit-a-thons made significant contribution considering the free files uploaded to the Wikimedia Commons. Three edit-a-thons from 2020 were especially significant, with a total of about 800 uploaded files.¹⁷

Through the internships during 2016-2021, the trainings of Wikilibrarians were attended by a total of 143 students and as a result an average of between 20 and 30 articles were received per year, including a significant number of uploaded free files, mostly photographs. For example, as part of a student internship in 2021, 36 files were uploaded to Wikimedia Commons.

Since Wiki-librarian inclusion in the 1Lib1Ref campaign in 2018, the achieved results concerning the upload of references were getting better. Thus, in 2018, 786 references were added, in 2019 another 1672, in 2020 another 4052, while in 2021, 17112 references were added. On a global level, the community of Serbian Wikipedia, according to the number of references added within 1Lib1Ref campaign, took the third place in 2019, the second place in 2020, and the first place in 2021. In 2021 (which was top rated according to the number of added references), among the 10 users who added most references on the global level, 5 of them were from the Serbian Wikipedia.¹⁸

Since 2015, through all the activities held in the Wiki-librarian project in total, several hundred articles have been created or updated on Serbian Wikipedia every year.

The Wiki Librarian project was presented at several international and domestic conferences, as well as at several local gatherings of librarians and

^{17.} Activities and results of Wiki-librarians for 2020, access date July 1st 2021.

^{18.} Local results of the 1Lib1Ref campaign for 2021, access date July 1st 2021.

Wikipedians organized on various occasions. In this way, greater dissemination of the project was achieved, several posters and articles were published, which all led to some new collaborations. Among the published articles, (Popović, Ševkušić, and Stakić 2015; Krinulović, Stijepović, and Stakić 2015; Antonić, Živanović, and Popović 2017; Popović et al. 2018) stand out. Posters from the international conferences INFORUM - 22nd Annual Conference on Professional Information Resources (Prague 2016), INFORUM - 23rd Annual Conference on Professional Information Resources (Prague 2017), 10th International Conference of the European Guidelines for Cooperation of Libraries, Archives and Museums (Sarajevo 2018) are attached as photos (figures 1, 2, 3).¹⁹ In the paper (Obradović et al. 2020), the Wikilibrarian is mentioned as one of the Wikimedia Serbia projects, while in the section on the application of Creative Commons license in Serbia, the University Library "Svetozar Marković" was mentioned along with the number of faculties.

The importance of Wiki-librarian project is reflected in the fact that it enabled other libraries to participate in the activities related to Wikipedia through the release and digitization of content, as well as through the realization of the Wikipedian in Residence project. After the University Library, the most successful cooperation was achieved with the Belgrade City Library, starting from 2019 where, in addition to library-type projects, Milica Buha developed the Wiki senior project intended for training and motivating older participants, retirees, to work on Wikipedia.

Another important aspect of Wiki-librarians is help in overcoming the gender gap on Wikipedia (Ratković and Madžarević 2021). According to various surveys which were conducted on a sample of Wikipedia editors, the share of women among them is up to one-sixth or one-fifth at best, see (Graells-Garrido, Lalmas, and Menczer 2015; Maljković 2015). The Wiki Librarian project contributes to a significant increase in the number of women on Wikipedia since the share of women librarians and librarianship students is reversed in relation to the Wikipedia average, with a majority of 80 percent and higher. While this is not an essential item for the project itself, this fact has its value and weight for the bigger picture. The members of the Wiki-librarian project themselves have been participating in the global WikiGap²⁰ campaign since 2018, which is usually realized in the form of an edit-a-thon on Wikipedia and aims to reduce the gender gap on Wikipedia.

^{19.} The first two posters are also available at the links Poster inforum 2016 and poster inforum 2017, accessed July 1^{st} 2021.

^{20.} WikiGap, accessed July 1st 2021.

At the end of 2017, Wikimedia Serbia declared the Wiki-librarian project as its best project for the year. In addition, Wikimedia Serbia awarded Aleksandra Popović the annual "Branislav Jovanović" award for 2020, as stated in the explanation of the award "For successfully running the Wiki-librarian project and the overall work and Serbian Wikipedia page revision".

5 Conclusion

Digitization of the library fund provides access to different types of content. Therefore the Wiki Librarian project was created and persisted for many years. The leading idea of the project is to enrich Wikipedia, as the most important project of the Wikimedia Foundation, with the highest possible quality content. Libraries hold invaluable treasure that is not easily accessible to everyone. Uploading content to Wikimedia Commons is an ideal way to promote works with expired copyrights or those whose authors want to provide open access. Librarians – as a well-connected community, whose members have access to reference literature in their workplaces, are skilled in finding valid and verifiable information, familiar with the rich funds and collections of their institutions and have experience in training users of different ages and levels of education so they are the perfect choice for Wikipedia editors. By relying on their expertise, librarians can make significant contributions to better data structuring and more efficient indexing of content through Wikipedia projects.

In seven years of existence, the Wiki Librarian project has trained several hundred librarians from all over Serbia to work on Wikipedia through different activities. In addition, several generations of librarianship students at the Faculty of Philology participated in the project. Numerous edit-a-thons were realized within the project, which significantly enriched the content of Serbian Wikipedia. In that way, several thousand articles were posted or updated. In addition, a large number of publications have been digitized and placed on the Wikimedia Commons, where, apart from them, there is also a large number of photographs created and posted by project participants. Particularly successful activity of Wiki-librarians was the participation in the global campaign 1Lib1Ref, in which, during 2021, the community of Serbian Wikipedia entered the largest number of references on a global level. The project contributes to reducing the gender gap on Wikipedia, because due to the circumstances, the vast majority of librarians who passed the project are women. So far, activities of the project are partially presented in several publications and poster presentations from conferences. These activities are presented in this paper in more comprehensive and studious manner.

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Open Science on Wikipedia: Libraries' Activities in Serbia

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Open Science

Open science should make scientific information available. There is a trendnery that scientific results are published immediately after the research. The application of open science has already shown that in that way science develops faster and raises the level of deviation of popen Guide to Open Science was published in 2014. Open science makes general science more transparent and accessible to a bligger number of researchers. Open science enables faster measurement of bibliometric indicators which influence both research and researchers (dataton, hindex, Journal Impact Fator).

Wiki Marathon

Wiki Marathon is an event organized within Wiki Projects. Its topic is defined in advance and all participants either write or edit articles on that specific topic on Wikipedia. It can last a day or several days. Both trained Wikipedia editors and beginners can participate.

topic on Wikipedia. It can last a day or several days. Both trained Wikipedia editors and beginnes can participati. Wiki Magnaton Open Science was organized within the project and articles on Wiki Magnation Open Science was organized within the project and articles on articles on Open Arccess Novement and Open Education. Os Software, digital repositories and valuable sources of Information. New articles were written also about the specific following foroits: Budgest Open Access Initiates Berlin Declaration on Open Access to Knowledge in the Sciences and Sciences and Arcess Publishing for a Access Initiates Sciences and Access Publishing for Declaration and Betheads Sciences of Access Publishing for Access Publishing Access Publishing Sciences (Sciences) and Sciences (Sciences) S



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Wiki Librarian

In 2015 the University Library "Svetozar Marković" in Belgrade. Serbia, started a vers successful project Wilk Librarian in cooperation with the Faculty of project bias control with the start of the serbig started with the started started started started started started Wilkpedia in Serbian and editing pages on other Wilk Projects. Librarians are experts in finding valid and relevant sources of information. They have access to reference collections and printed publications. Many have access to reference collections and printed publications. Many have access to reference collections and printed publications. Many have access to reference collections and printed publications. Many have this print of the started started by the started started make them available to everyone via Wilkipedia.



<u>Wikipedia</u>

Wikipedia is a free encyclopedia which everyone can edit". Wikipedia is use as one of the first sources of information. In order for an article on Wikipedia to be wild it has to be welffable. The manses that if mush we appropriate to be wild it has to be welffable. The manses that if mush we appropriate 2003. The title page was created in February 2003, and the first articles were published in September. Since them the number of articles has been increasing, and there is a trend in article states bean of articles. The sheen increasing on Wikipedia.

Guide to Open Science on link http://digitheadslabnotebook.blogspotrs/2014/01/guide-to-open-science.html
Simcha Jong, Kremena Slavova (2014), When publications lead to products: The open science conundrum in new product development.
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Figure 1. Poster from the conference INFORUM 2016

er by Aleksandar Milosevi

Periodicals on Wikipedia: Serbian Newspapers, Journals and Yearbooks

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Djordje Stakic



Serbian periodicals are presented on Wikipedia which is a suitable platform for dispairing valid and vertifiable information available to users varifiavide. Printing press reflects cultural level of a society and list orie in the development of such a society is undisputed. Serbian periodicals have a long publication history as the first scheint messpares had peared before the establisment and official proclamation of the restored Serbian state. The first Serbian journed in Savonic-Serbian methical "Savone-serbisi) magazint was printed in Venice in 1768. The first scientific journal in medical sciences entitled. Sirpla in the acteologizen distances were being prepared. Today the centuries were being prepared. Today, this can be presented in a simpler and improved way via the biggest online encyclopedia which has been growing and developing on a daily basis.

Wikipedia, Online Encyclopedia

Wikipedia, as a source of information, connects texts with factual data, illustrations, front pages, editors, authors, bibliographic data, different sources and ilterature thus making a unique whole and knowledge available to anyone. It also provides data via links to digital collections of newspapers and magazines.

periodicals journals newspapers Online Encyclopedia

Wikipedia Serbia



Figure 2. Poster from the conference INFORUM 2017



Figure 3. Poster from the 10th International Conference of the European Guidelines for Cooperation of Libraries, Archives and Museums (Sarajevo 2018)