

Contents lists available at ScienceDirect

## Internet and Higher Education



# Students' use of Wikipedia as an academic resource — Patterns of use and perceptions of usefulness



### Neil Selwyn<sup>a,\*</sup>, Stephen Gorard<sup>b</sup>

<sup>a</sup> Faculty of Education, Monash University, Australia

<sup>b</sup> School of Education, Durham University, UK

#### ARTICLE INFO

Article history: Accepted 23 August 2015 Available online 5 September 2015

Keywords: Wikipedia Undergraduates Survey

#### ABSTRACT

Wikipedia is now an established information source in contemporary society. With initial fears over its detrimental influence on scholarship and study habits now subsiding, this paper investigates what part Wikipedia plays in the academic lives of undergraduate students. The paper draws upon survey data gathered from students across two universities in Australia (n = 1658), alongside follow-up group interview data from a subsample of 35 students. Analysis of this data suggests that Wikipedia is now an embedded feature of most students' study, although to a lesser extent than other online information sources such as YouTube and Facebook. For the most part, Wikipedia was described as an introductory and/or supplementary source of information – providing initial orientation and occasional clarification on study topics. While 87.5% of students reported using Wikipedia, it was seen to be of limited usefulness when compared with university-provided library resources, e-books, learning management systems, lecture recordings and academic literature databases. These findings were notably patterned in terms of students' gender, year of study, first language spoken and subject of study.

© 2015 Elsevier Inc. All rights reserved.

#### 1. Introduction

As many internet users will be aware, Wikipedia is an online encyclopaedia provided in an open format where users can create, amend and delete entries and information as they feel fit. Perhaps the most appropriate source of background information about Wikipedia is Wikipedia itself. Here we learn that (at the time of writing) 288 different language versions of Wikipedia have been established since 2001, with the original English-language version remaining the largest with over 4.6 million articles. The Anglophone version of Wikipedia hosts around 23 million user accounts and nearly 75,000 active editors. These figures are dwarfed by the usage statistics associated with Wikipedia. As the sixth most used website in the world, Wikipedia attracts over 18 billion page views and approaching 500 million unique visitors each month. In this sense, Wikipedia represents one of the largest and most recognizable reference resources of current times.

The role that Wikipedia plays in contemporary education has understandably become a topic of much debate and disagreement. On one hand, the educational value of Wikipedia has been welcomed by some educators. Wikipedia is seen as "a unique opportunity for educating students in digital literacy" (Okoli, Mehdi, Mesgari, Nielsen, & Lanamäki, 2014, p.2381). The website has also been heralded in terms of its

E-mail address: neil.selwyn@monash.edu (N. Selwyn).

democratization of knowledge creation (Konieczny, 2014). As John Willinsky (2009, p.xiii) has argued:

"Today a student who makes the slightest correction to a Wikipedia article is contributing more to the state of public knowledge, in a matter of minutes, than I was able to do over the course of my entire grade school education, such as it was".

In contrast, a variety of concerns have been repeated regarding the quality of information on Wikipedia — most notably its accuracy and scope (Denning, Horning, Parnas, & Weinstein, 2005), as well as students' varying abilities to make discerning and critical use of Wikipedia content (Shen, Cheung, & Lee, 2013). Nevertheless, by the beginning of the 2010s Wikipedia was beginning to be seen as an accepted – if not wholly welcomed – feature of higher education. As Head and Eisenberg (2010, n.p) conceded:

"Wikipedia meets the needs of college students because it offers a mixture of coverage, currency, convenience and comprehensibility in a world where credibility is less of a given or an expectation from today's students".

These debates need to be contextualized against the emerging empirical literature on the realities of students' digital technology use in education. Indeed, any discussion of students' use of Wikipedia needs to be set as part of the wider literature on information-seeking behavior with electronic sources (e.g. Nicholas et al. 2009) – particularly online media that support the creation and sharing of user-generated

<sup>\*</sup> Corresponding author at: Faculty of Education, Monash University, Wellington Road, Clayton, Melbourne, VIC 3800, Australia.

content amongst communities of users (e.g. blogs, microblogs, content sharing and rating sites, social networks and social Q&As). The burgeoning literature on students' information behavior suggests that online media are part of a broad information landscape – complementing printed resources, traditional mass media, friends and peers (Sin, 2015). Research in this area has found key student concerns when using online sources of information to include issues of credibility, authority, relevance and timeliness of information (Kim et al., 2014), with such sources often used in initial phases of information seeking (Kiedrowski, Mahrholz, Griesbaum, & Rittberger, 2015).

However, Wikipedia is perhaps best seen as a distinct source of information from other online media. Whereas most online media act as sources of communication about information and/or the sharing of brief excerpts of information, Wikipedia is based specifically on the collaborative production of long-form, original information. With its emphasis on continuous co-creation of information purporting to lead to crowd-sourced authenticity and accuracy, Wikipedia has understandably come to play a prominent role within everyday information seeking behaviors.

This is particularly important when making sense of how Wikipedia is used within higher education, where students are expected to be selfdirected, and autonomous in their information seeking and information use. A handful of studies has begun to hint at the constrained role that Wikipedia plays in the academic lives of university students. Indeed, early studies have tended to report cautious attitudes amongst students toward using Wikipedia as anything more than a means of checking facts and providing background information (Lim, 2009). Use has been found to be more prevalent in some disciplines – i.e. engineering, science and architecture – than others (Head & Eisenberg, 2010). For most students Wikipedia is suggested to be a preliminary and preparatory source of information (Biddix, Joo, & Park, 2011), more likely to be used by students whose professors were perceived as (perhaps tacitly) endorsing its use (Lim, 2013).

#### 2. Research questions

As it approaches its fifteenth year, Wikipedia is no longer a novel and/or niche aspect of higher education — rather it is an unremarkable and established element of students' everyday internet use. To what extent, then, do the concerns of earlier commentators still hold true? Moreover, how has Wikipedia use settled as part of higher education study and leadership? From this perspective – and given the limited research carried out to date – the present paper addresses simple, exploratory questions of how current generations of university students are engaging with Wikipedia during their academic studies. In particular, the paper will now go on to consider the following research questions:

- To what extent is Wikipedia being used and valued as useful by undergraduate students?
- How does Wikipedia use and usefulness vary between different groups of students e.g. in terms of subject disciplines, age and stage, gender, educational attainment, cultural and linguistic diversity and so on?
- What role can Wikipedia be said to play in the academic lives of undergraduate students?

#### 3. Method

These questions are addressed through an analysis of survey data and follow-up group interviews collected as part of a larger study of digital technology use in universities. Data were collected during the 2014 academic year from students of two similarly sized and proportioned universities in Australia:

 University A – a public research-based university in the South-east of Australia. The university has five campuses with a current total enrolment of approximately 46,000 undergraduates, mostly taking on-campus courses. The university offers undergraduate and postgraduate degrees across ten main subject areas (in order of magnitude): Business and Economics (11,500 undergraduate students); Medicine, Nursing and Health Sciences (7500); Arts/Social Sciences (7400); Engineering (4250); Education (4000); Science (4000); Law (2500); Information Technology (2000); Pharmacy and Pharmaceutical Sciences (1400); and Art, Design and Architecture (1250).

 University B – a public research-based university in the East of Australia. The university has five campuses with a current total enrolment of approximately 31,500 undergraduates, mostly taking on-campus courses. The university offers undergraduate and postgraduate degrees across four subject areas (in order of magnitude): Business and associated subjects (10,000 undergraduate students); Arts, Education and Law (9000); Health and associated subjects (7500); and Science, Environment, Engineering and Technology (5000).

#### 3.1. Development and administration of survey instrument

All undergraduate students in both institutions were invited to complete an online questionnaire containing items investigating their engagement with digital technologies. The survey took the form of a 48 item questionnaire, designed to take between 15 and 20 min to complete. Closed and open-ended items were updated and adapted from a number of previous surveys of student technology use (BCIT, 2009, Kennedy, Krause, Gray, Judd, & Bennett, 2006, JISC, 2008, Dahlstrom, Walker, & Dziuban, 2013, Selwyn, 2008). The questionnaire was piloted with a group of 30 undergraduates at a comparable higher education institution for sense and ease of completion (the instrument was not validated). The questionnaire was administered online via the Qualtrics online survey platform. The survey was promoted to students through email, faculty communications, on-campus print and online advertising.

#### 3.2. Survey sample

The self-selecting sample of those students who chose to respond consisted of 1658 students with an age range of 17 to 66 (mean age = 22.5, SD = 6.9). As can be seen in Table 1, the sample was varied in terms of academic performance, mode of study, domicile status and cultural and linguistic diversity, although there was an overrepresentation of female students (66.6% in this study compared with 55.8% nationally according to official statistics (Australian Department of Industry, 2012), full-time students (92.9% versus 70.3% nationally) and those taking medicine (over-representation by 6%), business (under-representation by 10%) and science subjects (over-representation by 6%).

#### 3.3. Follow-up group interviews

Follow-up group interviews were then conducted with volunteer respondents from the survey sample. These interviews were based around group discussion of a standard set of ten open-ended questions (see Appendix A), and lasted between 60 and 90 min. Each group interview was conducted face-to-face by a member of the research team, audio recorded and transcribed ver batim. Five group interviews were conducted with groups of students following 'STEM' subjects (i.e. science, technology, engineering, mathematics) and 'non-STEM' subjects (i.e. arts, humanities, social sciences, business, law):

- undergraduate 'STEM' subjects (University A) 8 participants
- undergraduate 'non-STEM' subjects i.e. arts/humanities/social sciences/business/law (University A) 7 participants
- undergraduate 'non-STEM' subjects (University A) 4 participants

Download English Version:

# https://daneshyari.com/en/article/357700

Download Persian Version:

https://daneshyari.com/article/357700

Daneshyari.com