

# PROVIDING ACCESS TO SCIENTIFIC KNOWLEDGE: Faculty views on Open Access publishing as a new channel of scholarly communication

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With the advent of the Internet, a whole new way of Open Access (OA) publishing was possible. This created a paradigmatic shift in publishing practices. With the OA movement, we have seen a paradigm shift in the way scholarly and scientific knowledge is contributed and accessed in the online world. However, despite the increase in popularity and the outreach efforts by the OA repository staff research shows that the term *open access* is poorly understood by faculty in general and often misunderstood. This qualitative study is an attempt to gain a better insight on how faculty member view OA publishing. The results show that faculty remain unfamiliar with OA and its goals, do not understand what OA stands for and faculty still have a myriad of concerns regarding participation in OA publishing.

## 1. Introduction

Historically, the publisher contributions to the scholarly publishing value chain concentrated on the distribution component; typewriting, printing, marketing, and fulfillment, which were specialized and expensive tasks that authors gladly delegated to publisher. However, with the evolution of digital publishing and networked distribution technologies, the relative value of print production and distribution declined. Also, with the latest development in the information and communication technology (ICT) the scholarly and scientific information could be distributed widely and more quickly. Therefore, authors and readers no longer have to depend heavily on the commercial publishers. In the last decade, scholars, academic librarians, and university administrators have advocated reclaiming the scholarly communication process from the sole control of the commercial publishing industry. These stakeholders believe that the traditional system of scholarly publication is unsustainable. With the advent of the Internet, a whole new way of OA publishing was possible. This created a paradigmatic shift in publishing practices. With the Open Access (OA) movement, we have seen a paradigm shift in the way scholarly and scientific content is contributed and accessed in the online world. Among different stakeholders in scholarly publishing, the most crucial are faculty members. Faculty member at most research universities are the primary authors of research literature, as well as the main users. However, the term *open access* is poorly understood by faculty in general and often misunderstood and there is confusion among faculty and researchers regarding the meaning of OA. This study is an attempt to gain a better understanding of why this is the case.

### 1.1. OA Publishing

Finding a way to assist faculty in gaining a more comprehensive understanding of the purpose of OA is a complicated task that requires a multifaceted approach. However, the first and foremost approach is the promotion of faculty participation through targeted education and outreach. The underlying notion behind this approach is to provide faculty and researchers with the understanding of the OA goals. Open Access is defined by Suber (2012) as literature in digital format, online, free of charge, and free of most copyright and licensing restrictions. The concept of OA publishing has proliferated after the three OA declarations, commonly known as BBB declarations. These are the Budapest Open Access Initiative (February 2002), the Bethesda Statement on Open Access Publishing (June 2003), and the Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities (October 2003). These initiatives define OA in slightly different manner. However the underlining notion behind all three OA movements is to provide the public with unrestricted, free access to scholarly research—much of which is publicly funded. The idea behind all three of the OA declarations derives from the understanding of knowledge as a public good.

## **1.2. Scientific Knowledge as a Public Good**

There are those who believe that scientific knowledge is meant to exist as a “common property” (Merton, 1968), as it derives from the federal, state and local government funds. The National Science Foundation (NSF) 2015 budget appropriation was \$7.344 billion. It is widely believed within academic circles that the knowledge created by an individual and then recorded by an institution or organization should become available for later use, thus laying the foundation for future knowledge. Thus, one can argue that the failure to communicate knowledge and distribute information can significantly hinder the potential for new ideas and advancement of scientific knowledge. As information professionals, we have the responsibility to ensure the dissemination of knowledge and our goal is not complete unless we manage to provide information that is widely and readily available.

## **2. OA publishing as a new channel of scholarly communication**

The advancement of ICT and the World Wide Web do offer opportunities to mitigate the problem of ‘serials crises. The advances in ICT have led to the emergence of the three OA movement. In the nutshell, the OA philosophy is: research funded by tax payers should be available free of charge to tax payers. In addition, OA proponents argue that it increases authors’ visibility, global presence, accessibility, opportunity for collaboration, impact factor, and capability to get an instant feedback, comments and critical reflections.

## **3. Faculty views on Open Access publishing**

Research shows that faculty have been reluctant to embrace OA in theory and in practice. A study conducted by Morris & Thorn (2009), with scholars in Europe, the Americas and Asia reveals that most respondents supported the idea of OA. However, there was low awareness of self-archiving practices (48.2%) and even less certainty with repositories (23.3%), than of OA journals (74.1%). A study by Oguz & Assefa (2014) reveals that over half (53%) of the faculty members had positive perception of OA repositories. More than half (59%) of the faculty surveyed by Primary Research Group (2009) understood the term *institutional digital repositories*. Another study conducted by Kocken and Wical (2013), reveals that faculty did not have a satisfactory understanding of OA, and around 70% of respondents were not aware of OA and its goals. The overall results from the Primary Research Group (2009) study show that 37.9 % do not understand it or are not sure what OA movement stands for and only 3.5 % do not sympathize with OA goals. While 30.5% are not interested in it or have some sympathy with OA goals, but feel like it’s more important to cooperate with commercial publishers.

### **6.1 Results of the current study on faculty views towards OA publishing**

#### **3.1.1. Survey procedure**

To explore faculty views on OA publishing the current study investigated faculty attitudes toward OA repositories. Data was collected through an open-ended web-based questionnaire, administered through the online tool Qualtrics. The first question asked the respondents to describe the reasons that motivates them to participate in OA repositories. While the second question provided an opportunity for the respondents to express their overall concerns regarding participation (depositing) in OA repository. As recommended by Lofland, and Lofland, (1995), the coding themes were divided in two broad categories; the motivating factors and faculty concerns regarding participation in OA publishing.

#### **3.1.2. Faculty Support for OA**

Some of the faculty in the current study share the view of OA proponents who argue that OA is a new form of scholarly communication that stems out the notion of scientific knowledge as a public good, with the emphasis on sharing the scientific knowledge for the advancement of science. The results reveal that a good portion of faculty (n= 19) expressed their support for OA, and their views aligned with the OA goals. The following comments from respondents are some examples that illustrate this point. One respondent stated, “research supported by publicly-funded grants, or conducted during the course of work at a public institution, should be freely available to the public” (MO074), and “Open access for scholars everywhere” (MO044). Another responded stated, “belief in

scholarly dissemination. Belief in free access to information” (MO025). While others expressed a rather *altruistic* behavior of sharing their work for the benefit of others. One respondent stated that OA “enhances research by sharing more freely” (MO067). Another respondent shared the belief of knowledge as a public good, and the importance of providing access of his/her work to others, and contributing to the research knowledge. “Publications that derive from research that was supported with public funds should be freely available to the public” (MO011). In addition, another responded expressed the willingness of sharing his/her work with others. “I highly value OA, and value sharing my knowledge with others” (MO040). On the other hand, like previous findings by Primary Research Group (2009), some respondents expressed awareness of OA and its goals but felt like it’s more important to cooperate with commercial publishers. “I’m old school, and while the principle of open access sounds fine, I do not believe it holds the same value in any sense as peer-reviewed publications in scholarly journals and books that have been vetted by publishers/reviewers for publication” (MO038). While another respondent perceived the OA publishing as supplementary to traditional publishing. “At the moment, I would only consider depositing work to an OA if I am unable or unwilling to publish it with a peer-reviewed journal or academic press” (MO014). Overall, it appears that while some faculty (19 out 138 respondents) expressed clear support for OA and its goals, others strongly believed in sharing their knowledge and that publicly funded research should be available to all. Furthermore, some faculty members view OA publishing as means to contribute to the advancement of science while others see it as supplementary form to traditional publishing.

### 3.1.3. Faculty concerns regarding OA publishing

In addition to expressing support for OA publishing faculty members also voiced a myriad of concerns regarding participation in OA. In current study, a major concern expressed by a good portion of participants (n=13) was lack of familiarity or understanding of OA and its principles, as well as the process of submitting their work. A few respondents voiced their concerns by simply stating the following, “not familiar” (MO058), “no real concerns...simply not familiar” (HN049), “do not know enough about it” (MO018) and “don’t really know exactly what is meant by that term” (HN032). In addition, the other portion of respondents were not familiar with the process of submitting their work or how they could potentially benefit from it. For instance, one respondent stated, “I am not familiar with the reasons to deposit my work to an Open Access repository” (MO012). While other respondents expressed more concerns with the lack of awareness with the submission process itself, by stating the following, “lack of familiarity with the process” (MO055), another respondent stated, “I don’t understand the process and advantages/disadvantages” (HN055), the other simply stated “I honestly do not know much about it” (HN058).

## 4. Conclusion

In summary, faculty still largely remain unfamiliar with OA and there is still confusion regarding the meaning of OA. In addition, faculty expressed many other concerns with OA publishing. The current study found that more than half (62.3%) of faculty were not familiar with any of the three OA declarations, while 15 percent of faculty members supported OA publishing and idea of sharing their work with their colleagues for the benefit of science, collaboration, and altruistic motivations.

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