



Nota Técnica / Technical Note

Maskana, an institutional research journal. How to improve and maintain its relevance?

Maskana, revista de investigación institucional. ¿Cómo mejorar y mantener su relevancia?



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ABSTRACT

Research journals disseminate scholarly work to the scientific community and by doing so fulfill a fourfold role, namely sharing knowledge with colleagues for evaluation and verification, serving as a basis for the generation of new knowledge, assisting the society in turning it into a better one, and for the archiving of research work. An immense variety of national and international journals exist, varying from high- to low-ranked peer-reviewed journals, from printed to e-journals. At the occasion of the 10th anniversary of Maskana, an e-journal of the University of Cuenca, a description of its objectives and status is given. Given the recent and in the future to be expected decline in the reception of articles and Maskana's overall low impact factor, the author discusses some possibilities to maintain, even upgrade the journal's role and efficacity. The transformation with time of Maskana, preferably in cooperation with the other 6 active institutional e-journals, to a learning platform challenging the graduate students of the master programs in writing the thesis in the format of a peer-reviewed research article is probably the most realistic role for low-ranked institutional journals. If this concept works, other universities in future might be invited to join the UJs adventure.

Keywords: University Journal, academic journal, relevance, quality.

RESUMEN

Las revistas de investigación difunden el trabajo académico a la comunidad científica y, al hacerlo, cumplen una función cuádruple, a saber: compartir conocimientos con colegas para su evaluación y verificación, servir como base para la generación de nuevos conocimientos, ayudar a la sociedad a convertirlos en mejores, y para el archivo de trabajos de investigación. Existe una inmensa variedad de revistas nacionales e internacionales, que varían desde revistas revisadas por pares de alto o bajo impacto, y desde revistas impresas hasta revistas electrónicas. Con motivo del 10º aniversario de Maskana, revista electrónica de la Universidad de Cuenca, se da una descripción de sus objetivos y situación. Dada la reciente y la previsible disminución en la recepción de artículos en el futuro, y además tomando en cuenta el bajo factor de impacto general de Maskana, el autor analiza algunas posibilidades para mantener, e incluso mejorar, el papel y la eficacia de la revista. La transformación con el tiempo de Maskana, preferiblemente en cooperación con las otras 6 revistas electrónicas institucionales activas, a una plataforma de aprendizaje que desafíe a los estudiantes graduados de los programas de maestría a escribir la tesis en el formato de un artículo de investigación revisado por pares es probablemente el papel más realista para las revistas institucionales de bajo rango. Si este concepto funciona, se podría invitar a otras universidades en el futuro a unirse a la aventura de los "University Journals" o UJs.

Palabras clave: Revista universitaria, revista académica, relevancia, calidad.

1. INTRODUCTION

The first number of Maskana was published in December 2010. After 10 years it is probably a good moment to analyze whether the journal has achieved its objectives and whether it makes sense to go on with the journal, given the multitude of institutional and academic journals we are confronted with today (Gu & Blackmore, 2016, Collazo-Reyes, 2014). Maskana publishes research articles and operates under the auspices of the Dirección de Investigación de la Universidad de Cuenca (DIUC), the university's central research office. The journal's main objective is offering to the academic and research

community of the institution a platform to practice the art of article writing, and getting acquainted with the journal's submission and review procedures. When Maskana emerged at the end of 2010, the main focus of the university was still on teaching, research was slowly emerging as was the number of staff holding a PhD. The rather weak research profile of the institute before 2010 can best be illustrated using as a barometer the number of academic articles registered in Scopus journal database. Before 1967 there is no record of any article in Scopus journal database of an author of the university. In the period 1967-2010, the university has 96 research articles registered in Scopus, corresponding to a yearly average of



2.23 articles (STD=4.03), whereas in the period 2011-2020 the academic and research staff of the university realized the publication of 1259 articles in a journal registered in Scopus, corresponding to a yearly average record of 12.59 articles (STD=94.38), varying from 16 articles in 2011 up to 264 in 2020.

The rising trend in the number of articles published in peer-reviewed journals by the staff of the university in the last decade is the result of multiple factors, such as a rise in staff holding a PhD, the Prometeo program of the government which enabled Ecuador's higher education institutions to attract senior academic and research staff from abroad to assist the institution in improving and strengthening their research profile, an increase in competitive funds, a change in the attitude of the authorities who realized that a strong research profile is needed to upgrade continuously the institution's educational profile and the cooperation with the society, and the positive role of institutional journals such as Maskana. Analysis of the author teams, who published in Maskana, clearly shows that after the acceptance of 1 to 2 papers, authors seem to possess the capacity and the courage to submit their next article to an academic journal registered in the journal databases of Scopus, Web of Science, PubMed, or any other journal database.

The observed growth of articles published in peerreviewed academic journals is not observable in Maskana, one of the 11, 7 active and 4 inactive, institutional journals of the University of Cuenca. Maskana is a biannual journal publishing original research in all areas of science. It is a peer-reviewed open-access journal without commercial purpose. The journal is published online in the OJS/PKP system¹ and is freely accessible². The first issue of the journal was published in December 2010, and since then 21 issues, or 11 annual volumes, have been published. A total of 187 research articles have been accepted, varying between 6 and 13 articles per number, corresponding to a total of 2489 pages. On average 40% of the submitted articles were accepted after review. Classification of the published articles per main science area yields the following distribution: 41.2% of the articles belong to Social Sciences and Humanities, 8.5% to Natural and Environmental Sciences, 38.5% to the field of Engineering and Exact Sciences, and 11.8% to Life and Health Sciences. In the period 2010-2014 belonged the majority of accepted articles to the Engineering discipline, whereas more recently the bulk of articles are submitted by academic staff and researchers belonging to the domain of Social Sciences. Maskana accepts articles published in Spanish and English; 53 of the published articles (28.3%) were written in English, and 93% of the first authors is Ecuadorian while 7% possess the international nationality. The majority of the first authors, namely 70%, are docent or researcher associated with the university.

Recently Maskana includes three types of articles: original research papers, an editorial note addressing a general and actual issue, and technical notes. Articles are accepted as

(PKP).

a technical note when the article gives a brief description of a specific development, technique or procedure, or even the description of a modification of an existing technique, procedure or a device method, or the results of an exploratory study. The journal obliges authors to use the APA citation/referencing style. Submitted articles are sent to academics and professionals working in the same field as the article and having experience in the evaluation of research articles. Normally, two reviewers are contacted who provide free of charge their review to the editor, who in turn provides feedback to the authors. The entire process is supervised by the editorial board, consisting of international experts who monitor the quality of the journal. Information on the citation of Maskana's articles can be found in Google Academic, an open-access repository. The main Google Academic indices derived for the entire period of the journal's existence are the total number of citations (1484), the h-index³ (17) and the i10index4 (38). The value of those indices did not decline drastically and based on the data of the past 5 years, equal to 1333 (citations), 16 (h-index), and 33 (i10-index), indicating that the journal is relatively stable performing. However, the journal impact factor (IF5) gives a less favorable impression. The average value of this factor based on all available data equals 5.63, whereas the average value of IF dropped to 1.76, using the available data of the last 5 years. Last but not least, Maskana is indexed in the bibliographic information systems Latindex 2.0, REDIB, and DOAJ and each article receives when published a digital object identifier (DOI) code.

Notwithstanding the Google Scholar metrics of Maskana did not drop that much since 2010, those metrics do not reveal information on the journal's position at the national and international level. The ranking of a journal is a widely used metric in academia, expressing the journal's impact and quality, the difficulty of getting an article accepted for publication, and the associated prestige. Independent of the ranking system used, journals are classically ranked in four categories, respectively q1 (the top 25% journals), q2 (journals in the 25-50% group), q3 (journals in the 50-75% group), and q4 (journals in the 75-100% group). Several countries use this ranking as a research evaluation tool, and it is also the ambition of an author to get his/her research work published in the highest class, not only for the appreciation of the research quality but also for the indirect benefits associated with it. Up to today, Maskana is not included in any of the journal ranking systems, such as SCImago, Scopus, WoS, SciELO, or any other ranking system, for the simple reasons that the journal does not meet the minimum criteria of acceptance. Maskana is not just alone in this situation, because the SCImago Journal Ranking system⁶ (SJR) lists for 2019 only 3 Ecuadorian journals, all in the category q4, respectively the Revista Ecuatoriana de Neurología, La Granja, and the Revista Bionatura. A disadvantage for Maskana of not yet being indexed in a journal ranking system is the fact that it is a multidisciplinary journal, while the majority of indexed

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actual issue, and technical notes. Articles are accepted as

OJS/PKP: Open Journal Systems (OJS) is an open-source software application for the management and publication of scholarly journals, developed by Public Knowledge Project

² https://www.ucuenca.edu.ec/ojs/index.php/maskana

³ h-index: an h-index of 17 means that 17 articles of the 187 published articles in the Journal have been cited 17 times or

more. The h-index is a measure of the apparent scientific impact of the journal.

⁴ i10-index: this index depicts the number of Journal articles with at least 10 citations.

⁵ IF: is the ratio of the number of citations received by the journal's articles in a year or given period.

⁶ SJR: https://www.scimagojr.com/ journalrank.php?country=EC

journals are disciplinary. Of course, in addition, Maskana does not score well on most indexation criteria of the different journal ranking systems.

The challenge for Maskana, as an institutional multidisciplinary journal will be how to maintain and improve its current status, in particular in view of the Covid-19 challenges, which for sure will result in a decline in research funding at the international, national and institutional level, leading to a decline in the submission of research articles. Consequently, the abovecited metrics will drop and might lead to a temporary or definitive inactive state of the journal. In the following, we will discuss subsequently the following aspects: (i) journals remain important instruments in the dissemination of knowledge; (2) is it needed and will it be possible to get Maskana indexed in for example SciELO, Scopus Elsevier, WoS, or any other national or international journal ranking system; (3) is there still a future for institutional journals?; (4) offers an online University Journal (UJ), with ISSN, DOI, index, etc., a stable way out to the future?; and (5) are there other realistic alternatives?

2. THE RELEVANCE OF RESEARCH JOURNALS

The first journal in Europe that resembles today's peerreview academic journals, the Journal des Sçavans, was published in 1665 in France by Denis de Sallo (Jinha, 2010). Its content included obituaries of famous men, church history, and legal reports, but with time the journal continued to be a leading academic journal in humanities. Since then, the number of journals grew steadily for over two centuries by about 3 to 3.5% yearly, and the last years accelerated the growth to 4% per year for articles and over 5% for journals (Johnson et al., 2018). According to these authors was mid-2018 the number of active scholarly peer-reviewed English language journals 33,100 (plus a further 9,400 non-English-language journals), collectively publishing yearly over 3 million articles. The explanation is the continued growth in research and resources, and the associated increase in the number of researchers, of whom the number stands between 7 and 8 million. Whereas the US was so far the leading country, China based on the yearly number of research papers produced recently overtook the US. China accounts for 19% of global articles, versus 18% for the US, while the scientific output of India in number of articles is growing rapidly, reaching 5% of global outputs, ahead of Germany, the UK, and Japan, each respectively 4%. Analysis of the top list of academic research databases such as Scopus, Web of Science, PubMed, ERIC, IEEE Xplore, Science Direct, DOAJ, and JSTOR shows that in 2019 the total number of articles registered in those 8 bibliographic databases equals 239,6 million (Paperpile⁷).

It is a blessing for the society that research and associated herewith the number of research papers are still growing not only constituting an impressive and powerful resource but also supporting humanity finding timely solutions for the ever new challenges the world faces. However, it also requires that the available and new knowledge be easily accessible, adsorbed, and used by the governments,

policy-makers, managers, lecturers, students, and the new generation of researchers. One can get access to the Scopus journal database either as a private person or as a member of a defined group of authorized users, for example via the library portal of the organization or institution. In both cases, the user needs a registration ID and password, with an end date for user access. Having paid the registration fee, which of course vary from a simple user to a defined group of users, one gets access to nearly 36,377 journal titles (22,794 active titles and 13,583 inactive titles) from approximately 11,678 publishers, of which 34,346 peer-reviewed journals in the fields of life sciences, social sciences, physical sciences, and health sciences. The registration costs are that high that an individual researcher cannot afford the registration. However, many universities in the high to middle-income countries provide academic staff and students access via an institutional license.

A solution to this is the open-access movement which supports the sharing of scientific research outside the paywalled silos of academic journals (Ingram, 2012). This author, in his blog, states that the academic-publishing business is unfair because it commercializes research that scientists in many cases created with public funding, get academics and experts to do the peer review for free, and then publishes the articles in limited-access journals that are only available to institutions at a high cost. Luckily for the research community, the open access movement is winning terrain. However, the open-access movement still faces headwind from inside, because still a large fraction of the academic community, primarily the authorities, link promotion, tenure nomination, the allocation of research grants, and other aspects of academic life, to the number of articles he/she published in high-ranked journals.

The above brief overview of scholarly articles in peerreviewed and open access journals is far from complete because in parallel a considerable amount of time and energy is devoted to publishing institutional journals. It is almost impossible to provide a full overview of the latter category. The number of institutional journals are considerably less in the northern hemisphere where it is the tradition to publish research primarily in academic journals, in contrast to the culture of the higher education institutes in the middle- to low-income countries. The enormous number of peer-reviewed articles that are published today is certainly not an excuse for the academic and research staff of those countries not to publish, on the contrary. They should base their research on the knowledge available in the international literature to derive appropriate, efficient, and sustainable solutions for the problems and constraints hindering the progress of the society at national, regional and local scale. In turn, findings ought to be published to make them accessible to society so that the locally generated knowledge is used by the teaching staff for the continuous upgrading of the educational programs, and policymakers to allow them to improve policies to the changing conditions of the society saving time, effort and money. Similarly, published research can be immensely helpful for managers of industrial plants enabling them to upgrade the production process, reduce the environmental impact, in addition to the improvement of the quality of the industrial product. New research findings will be continuously requested by the society, to assist the people in coping with the

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https://paperpile.com/g/academic-research-databases

challenges arising from the ongoing demographic expansion. In conclusion, research will never end, today and in the future even needed more than before, and research and publishing will be a never-ending task of academia.

3. CAN MASKANA'S QUALITY BE UPGRADED?

The question if it makes sense and if it is relevant to upgrade the institutional journal with low impact to an academic journal with impact. First, the transfer if possible is contradictory to the original objective of Maskana, which was being a learning platform for the non-experienced teaching and research staff in the writing of research articles. Peer-reviewed academic journals are not in the first-place learning platforms, their objective is to publish quality articles that after an advanced review process are accepted for publication. The primary aim of peer-reviewed academic articles are the publishing of new findings, strategic and technological developments in the various areas of science. Analysis of the 187 articles in Maskana, since the first published article, clearly shows that the majority of the published articles are researchbased, aiming to test the suitability and the usefulness of known methodological, technological, and policy solutions for solving local problems. The majority of the published articles start with defining the problem to be studied, an exhaustive review of the related literature, the formulation of research questions, followed by the identification of the research methodology preferentially is applied to find adequate answers to the research questions, the assembling, and processing of data, the presentation of results, and their confrontation with existing findings, to conclude with the conclusion section. Although the structure of the articles in Maskana resemble the structure of high-level peer-reviewed articles, what the institutional articles miss is pioneering and innovative perspective and high-quality. This should not be surprising because the articles in Maskana reflect the average scientific level of the University of Cuenca, since 70% of the author teams that published an article in Maskana belong to this institution. So, upgrading of Maskana can only be materialized by improving the research profile of the university, or by publishing articles of renowned national or international academics. The latter will be unlikely because scientists of those institutions prefer to publish in high-quality level journals. But even if Maskana would receive articles from skilled scientists from outside the university, the limited size of the editing team, the moderate quality level of the few reviewers, and sparse financial resources will hinder the quality upgrading of the journal to meet the minimum indexing criteria of Scopus, WoS, JSTOR, and other journal databases. In conclusion, according to the author, it does not make sense to invest resources in Maskana to leverage it from an institutional journal to a peer-review high-quality level journal. It is kind of a utopia, comparable to the effort required by an inexperienced team of mountain climbers to conquer Mount Everest.

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4. REPLACING INSTITUTIONAL JOURNALS WITH A UNIVERSITY JOURNAL

The University of Cuenca publishes in its digital repository⁸ 11 institutional journals, of which 4 journals are inactive for various reasons. The 7 active journals are disciplinary, with the exception of Maskana. The 6 disciplinary institutional e-journals cover respectively the science domains of architecture and urbanism (ESTOA), economy and politics (Revista Economía y Política), arts and arts education (TSANTSA and Revista de Investigación y Pedagogía del Arte), literature, historical, philosophical, anthropological, archaeological and educational perspectives of culture and society (PUCARA), and medicine (Revista de la Facultad de Ciencias Médicas). The inactive institutional e-journals are Anales, the oldest journal of the university covering all science areas, IURIS a journal of the Faculty of Law, Political and Social Sciences, ACORDES publishing articles in the area of socio-organizational, socio-political, socio-environmental and social and solidarity economy processes, and the journal of the Faculty of Chemical Sciences. The active institutional journals are of recent date launched in the period 2010-2017, they all claim to apply the peer-review process, the average number of articles per issue varies between 12 and 25.6, the total number of all citations range from 22 to 975, and the journal impact factor using for each of the active journals all available data varies between 0.27 and 5.63. Those data clearly demonstrate that none of the active institutional journals are outstanding and that the efficiency of the invested human and financial resources of each journal is low to moderate.

A University Journal (UJ) is a multidisciplinary journal that bundles all the human and financial resources of the existing institutional journals, with the objective to provide a quality, reviewed, open-access infrastructure for scholarly articles and other research products. By merging the existing resources, it will be possible to develop and implement an innovative, high-quality, and dynamic peerreview process that streamlines the article submission, the review process, and the delivery of a more predictable outcome. Articles can be continuously published online the moment they are accepted, avoiding the waiting period to the traditional semestrial or annual publication date. The academic and professional profile of University Journals guarantees the submission of articles by institutional and non-institutional researchers, and the national and international recognition of the journal. Furthermore, UJs do not necessarily have to belong to one university, in principle several universities can participate by applying the same approach. They are a low-cost alternative to the current journal system of Elsevier, Taylor & Francis, Wiley-Blackwell, Springer, Sage, Hindawi, among other publishers, that requires authors to transfer their copyrights and charge article processing costs. The UJ platform offers an efficient workflow and quick publication. The first UJ platform9 was launched in 2020 and is an initiative of 14 international European universities, under the impulse of the University of Amsterdam of The Netherlands.

⁸ https://publicaciones.ucuenca.edu.ec/ojs/

⁹ https://universityjournals.eu/ index.php/about-universityjournals/

In analogy, a UJ platform could for example be formed at the level of the University of Cuenca merging the 7 active journals into a University Journal. Joining the forces of the 7 editorial teams shall have a positive impact on the quality of the articles and the journal, the volume of articles that annually will be published and the overall cost will be considerably less than the sum of the editorial cost of the 7 journals. It is logical that the initiation of a UJ will be accompanied by standardization of the different processes such as the review and evaluation of the articles. For the publication, use can be made of the OJS/PKP system, the actual approach used today for each of the institutional journals. Of course, if relevant the UJ platform of the University of Cuenca could be extended by involving the 4 universities of the City of Cuenca in the UJ platform concept, i.e., each of the four universities publishes a UJ applying the same quality review process and electronic way of publication. The cooperation between the 4 universities will facilitate the upgrading of the UJs and reduce the overall costs. Other constructions are of course also possible as for example among the better-ranked public universities of Ecuador, or among the overseas universities with whom the staff of the University of Cuenca is cooperating. The establishment of a UJ platform at the level of the University of Cuenca, will not be that simple since one can expect that each institutional journal wants to maintain its autonomy, and for sure the process will be even more complex when multiple universities will be invited. Therefore, it might be wise to first consider whether the establishment of a UJ platform at the institutional level is a realistic and feasible project, before involving other universities in the concept.

5. DO OTHER REALISTIC ALTERNATIVES FOR INSTITUTIONAL JOURNALS EXIST?

Since the trend to publish research results in existing peerreviewed academic and open-access journals is increasing, it is to be expected that the better research groups of the university will prefer to continue submitting their articles to peer-reviewed academic and peerreviewed open-access journals. An additional aspect that stimulates academics and researchers to continue publishing in peer-reviewed journals is that the commercial publishers considerably accelerate the review and publication process of articles to counter the rising competition of the low-cost open-access publishers. Also, universities stimulate the academic staff and the researchers to publish their articles preferably in q1 or q2 journals, and if not feasible at least in q3 journals. Publishing research in high ranked journals will not only promote the fame of the authors and the university, but it will also positively impact the ranking of the university, facilitate the cooperation at national and international level, the cooperation with the public and private sector, and the acquisition of funds. With time, it will also have a positive effect on the educational profile of the university. The ongoing trend to get research published in high ranked journals is worldwide and for a couple of decades, also included in the regulations of doctoral programs. Namely, the regulations of PhD programs in many universities state that candidates to obtain permission to defend the doctoral thesis must have reworked part of the dissertation into two papers published or accepted for publication in peerreviewed academic journals and the third article in process. This is an additional reason why doctoral students will not be inclined to submit an article to an institutional journal.

An alternative and supporting role Maskana could play is serving as a publication platform for Master Programs. Students attending an academic master program are expected to conduct a thesis research project and to summarize in a dissertation the topic-related literature, approach, methodology, and results. This document, however, could with time be replaced by an article, with the classical article structure, that before publication in an institutional e-journal is reviewed. Doing so will provide the master's students the opportunity to familiarize themselves with the art of article writing, in complement with the reading of articles, a capacity students acquired during the undergraduate and graduate program. It is highly relevant for the future profession if the students at graduation possess the capacity and interest to continuously actualize their knowledge and experience by reading the literature related to their profession. Similarly, in the future, it is to be expected that the writing of reports and extension papers will have to be implemented increasingly during one's career. It is recommended that this scenario is critically analyzed for its added value with regard to the other study components of the master program. It will offer Maskana, or its successor, the opportunity to resume its original vocation of a learning platform.

6. CONCLUSIONS

Maskana is a multidisciplinary institutional e-journal, created in the second half of 2010, under the auspices of DIUC. Ten years later the journal is still active, however, the number of submitted and accepted articles and the metrics are slightly decreasing since 2016. It is expected that the Covid-19 pandemic, having a negative impact on research and the research output will further decline the submission rate of research articles. In addition, the fact that institutions and scientists today and in the near future will still give preference to publish their articles in higher ranked academic and open access journals, it is unlikely that the editorial board of Maskana soon will be overwhelmed by an increase in the submission of articles. Alternatives for the journal were discussed, among them the upgrading of Maskana from a low impact institutional journal to a medium ranked academic journal, the integration of the institutional low impact journals into a University Journal (UJ) platform with the online publication of accepted articles, the expansion of the UJ platform by inviting local, national, or even international universities, or using Maskana, eventually in cooperation with the other institutional journals, as a platform for the publication of the master dissertations in the format of a research paper. A major benefit of the latter concept is that the students will acquire the capacity of the reading and understanding of research papers, and how to structure and write a research paper. This concept offers a rewarding experience to the students and staff, and will contribute to communication and dissemination, an essential aspect of science. In addition, the distribution of the dissertation in the format of an article will considerably be more beneficial than that of the classically

printed format. Of course, it is up to the authorities to decide after analysis what option is the best to turn the low-impact institutional journals into something more visible, useful, with higher impact, and manageable with fewer resources.

REFERENCES

- Collazo-Reyes, F. (2014). Growth of the number of indexed journals of Latin America and the Caribbean: the effect on the impact of each country. *Scientometrics*, 98, 197-209. https://doi.org/10.1007/s11192-013-1036-2
- Gu, X., & Blackmore, K. (2016). Recent trends in academic journal growth. *Scientometrics*, 108, 693-716. https://doi.org/10.1007/s11192-016-1985-3
- Ingram, M. (2012). Why do we need academic journals in the first place? Blog on GigaOm Research Community. Available at https://gigaom.com/2012/02/22/why-do-we-need-academic -journals-in-the-first-place/
- Jinha, A. E. (2010). Article 50 million: an estimate of the number of scholarly articles in existence. *Learned Publishing*, 23, 258-263. https://doi.org/10.1087/20100308
- Johnson, R., Watkinson, A., & Mabe, M. (2018). An overview of scientific and scholarly publishing. The STM Report (5th ed.). 214 pp. Available at https://www.stmassoc.org/2018_10_04_STM_Report_2018.pdf