

Adoption of the Open Journal System as an Open Access Publication of Eastern Visayas State University, Philippines

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Abstract

This study focused on the development of an Open Journal System (OJS) for advanced education in Eastern Visayas State University (EVSU) in the Philippines. It is a descriptive and causal-comparative type of research, concentrating on technological innovation of an open-access program as a platform for online publication of research outputs. Faculty members and students of the EVSU Graduate School, along with experts from international universities, served as respondents in the survey. The faculty members are much aware of the characteristics of Open Access Publications (OAP) while the students are aware how OAP are being implemented. The respondents are generally favorable that research issued in Open Access journals is becoming a norm in online publishing and consequently beneficial to the scholarly community. The implementation of OJS is often experienced by professors while students sometimes experience the way OJS enables the publication of researches from various disciplines. The EVSU-GS OJS was designed for the development of open access, peer-reviewed publishing, providing the technical infrastructure not only for the online presentation of journal articles, but also an entire editorial management workflow, including article submission, multiple rounds of peer-review, and indexing.

Keywords: Academic publishing, open journal systems, journal publication, open access, Philippines

Introduction

Publication of research outputs of faculty members of colleges and universities in refereed journals has become a universal requirement for tenure in higher education institutions. This requirement hinges on the assumption that peer-reviewed or refereed journals of research are publications of high quality, credibility and integrity. But the practice of peer review and/or refereeing is not uniformly implemented by all higher education institutions thus, giving rise to a hug variance in the quality of journals of research published by colleges and universities in the country (CMO # 05, s. 2012). This policy promulgated by the Commission on Higher Education (CHED) is the cornerstone of research publication practices in the Philippines, albeit mostly through the traditional printed publications.

The recent trend of electronic journal publishing has been taken with serious considerations especially among top-notch universities. The CHED began to accredit journals as published online. Among these outlets are the *U.P. Diliman Journals Online* (http://journals.upd.edu.ph) of the University of the Philippines System and the *Philippine Studies: Historical and Ethnographic Viewpoints* (http://journals.ateneo.edu) from the Ateneo de Manila University. These online publications imbibed the traditional double-peer review process and refereeing at the same time adhering to the Open Access policies as practiced in the world today.

To facilitate the proliferation of open access publishing, computer applications were designed and made available online. Such technical advancement created an impetus for the academic sectors to take advantage of this technology in distributing their researches to a much wider audience—a phenomenon where inventions and new ideas became readily accessible throughout the globe—leading to further innovations that changed the way people lived today.

The Open Journal Systems (OJS) came into existence as one of the mainstream OA publishing program used by universities worldwide. It is an open-source software for the management of peer-reviewed academic journals, created by the Public Knowledge Project (http://pkp.sfu.ca/ojs/).

The OJS was intended to facilitate the development of open access, peer-reviewed publishing, providing the technical infrastructure not only for the online presentation of journal articles, but also an entire editorial management workflow, including article submission, multiple rounds of peer-review, and indexing. OJS relies upon individuals fulfilling different roles, such as the Journal manager, editor, reviewer, author, reader, etc. It has a module that supports subscription journals.

It has been designed to reduce the time and energy devoted to the clerical and managerial tasks associated with editing a journal, while improving the record keeping and efficiency of editorial processes. It seeks to improve the scholarly and public quality of journal publishing through a number of innovations, from making journal policies more transparent to improving indexing (Willinsky, 2005).

This research emphasizes the relevance of designing a system—utilizing the Open Journal System as a platform—for online submission, editing, publication and management of researches for post-baccalaureate and advanced studies at the Eastern Visayas State University.

It focused on a development of an Open Journal System (OJS) for advanced education in Eastern Visayas State University (EVSU) during school year 2015-2016. Specifically, it sought to answer the queries on: (a) the profile of the respondents in terms of the faculty and students' age, field of specialization/discipline, research experience and completed researches; (b) the level of awareness of the respondents on Open Journal System (OJS) in online publications at the EVSU Graduate School; (c) the attitude of the respondents towards OJS; (d) the experiences in relation to OJS as implemented of local respondents and external OJS experts; and, (e) the design of the OJS as a publishing application for multi-disciplinary researches of the EVSU Graduate School.

The design of the EVSU-GS OJS was derived from the standard system design and development by the Public Knowledge Project. The program could run in an offline mode for purposes of training and demonstration. For full operation, it will be hosted in a suitable server with its own unique domain.

Review of Literature and Studies

Educators, philosophers, scientists and technologists have conducted several studies associated with the concept of open access publications with the advent of information systems, particularly with a focus on liberalizing the flow of knowledge in the Internet. As used in this research, the design of an open journal system should be construed to mean as similar Web-based applications which deals on the technical submission, editing and publication of researches in the advanced education programs.

Cited Literatures

Can open access repositories and peer-reviewed journals co-exist? This issue was tackled by Pinfield (2006) in which he finally concluded that open access repositories and peer-reviewed journals are not necessarily in competition. There is a significant body of empirical evidence which shows that the two can (and do) coexist and may even be complementary.

The Public Knowledge Project is a research and development initiative directed toward improving the scholarly and public quality of academic research through the development of innovative online publishing and knowledge-sharing environments (Willinsky, et.al., 2010).

Stanford University scholars (Edgar and Willinsky, 2010) further elaborated that the Open Journal System (OJS) was designed to manage the journal's workflow, from manuscript submission through review to editorial work and then publication, while offering a ready means of publishing an online edition and better managing the journal's operating costs. This system was developed within a climate of concern among journal editors and staff over the costs and means of moving from print to online editions, as well as over the viability of open access models (by which, for example, authors make articles freely available through online institutional repositories and journals make their content freely accessible to readers).

In the Philippine setting, the Philippine Development Plan 2011-2016 and as articulated in the Strategic Plan of the Commission on Higher Education (CHED), reforms in higher education are aimed at maximizing the system's contribution towards developing competent and high-level human resources and generating knowledge and technologies needed for advancing the country's national development and competitiveness.

These urgently needed workable changes are systematically packaged and harmonized into the Higher Education Reform Agenda (HERA) which seeks to exact from the entire higher education system higher accountability of outcomes and impacts (Roadmap Public Higher Education Reform, 2010).

One of CHED's strategic directions is to achieve excellence and global competitiveness, which can only be realized if educational institutional utilize available resources while at the same time innovate, if not invent, new technologies. It is in this context that wide-spread distribution of knowledge through open access can be contributory to national development and propel massive scientific resurgence, behavioural modelling and humanistic identification.

Heylighen (2007) made an assumption that once created in the Internet, information is intrinsically not a scarce good, and therefore there is no a priori reason to restrict access to it. On the contrary, freely distributing information is likely to profit its creator, since it helps to improve the quality of the information, and to enhance the creator's expertise and reputation.

Moreover, open access obviously profits everybody else, and in particular those who otherwise would be too poor to pay for the information. People became willing to contribute to the collective development of an information product are efficiently directed to the tasks where their contribution is most likely to be fruitful. These innovations appear fundamental enough to revolutionize socio-economic systems (Weber, 2004), offering high hopes for the future, e.g. in stimulating innovation, education, democratization, and economic development. While openaccess distribution is not applicable to material resources, their cost as a fraction of the total economic cost of any good or service is becoming progressively smaller in a society that is ever more heavily dependent on information. Therefore, it could be theoretically envisaged that most economic value would eventually be produced under an open-access system.

Related Studies

Research-oriented publications on the topic of open-access journals have been few, and there is widespread concern about whether scholars will adopt this new form of scholarly communication. The growing number of open-access journals leads scholars to encounter decision-making situations in which they must choose one journal among multiple alternatives, including open access, non-open access and the interactive nature of today's Internet (Park, 2009).

The preceding idea led Sullow (2010) to lay the foundation of the *Interactive Online Journal*. He pointed out that in the electronic publishing field of today, work concentrates on the production of long-term publications, which can be spread by distribution of data media like CD ROMs. This distribution path is relatively slow and expensive for short-term publications, which must be updated at short intervals. For these publications, online access via networks is a more adequate way of distribution. Building a publishing system poses the question on how to integrate the diversity of sources and the multitude of functions to be fulfilled.

The paper of Jones and Andrew (2012) published in Edinburgh University delivered a detailed reflection and discussion of some of the most interesting and involved areas that were considered during the course of the open journal publication project, including the hidden implications of delivering open access status to the theses literature and the relationship between the open access movement and the open source ethos, under which the software tools to achieve the project's aims were developed.

As a benchmark for Eastern Visayas State University, the publication of e-theses could be explored as a future policy through proper handling of e-theses and continue to provide facilities—online journal system—in a production status, and to expand to store much of the school's research output in whatever form it may take. This could extend to providing remote storage facilities to other university services such as academic portfolios or e-learning frameworks.

In terms of research capability of state universities and colleges (SUCs) in Region VIII (Philippines), Villarino (2013) indicated that there was a significant difference in the perception of the faculty members and the administrators on the support of the university on benefits and incentives. However, the perception of the faculty and administrators on the support extended by the university on linkages, funding, laboratory facilities, research equipment, research staff, implementation, monitoring, evaluation, utilization, publication and dissemination there was no significant difference. In one instance, Aniga (2011) found out that in one SUC, the number of researches conducted by the respondents had a significant relationship with the implementation, monitoring, evaluation, utilization of research output, and publication and dissemination. This shows a parallel effect that when faculty members or students are well versed with research activities, it becomes very easy to publish research outputs.

Möller (2006) aptly concluded in her thesis that open access is a very new, dynamic, yet disruptive force that is compelling actors within the scholarly communication cycle (scholars, research funders, research evaluators, publishers, libraries) to reconsider their positions and strategies. Its fiercely attractive benefits cannot be won without considerable wrestling and reconfiguration of existing processes, protocols and mindsets. Notwithstanding the rapid growth of open access journals across all fields, it will take some time to achieve widespread changes to longstanding publishing models. Within the South African setting, it appears that more rapid advances will be made through efforts to mainstream the practice of self-archiving within institutional repositories, as these have recently made positive gains. The important long-term

objective is universal 100% open access to publicly funded research and all progress towards this goal is to be celebrated.

Theoretical Framework

Open access (OA) is an alternative business model for the publication of scholarly journals. It makes articles freely available to readers on the Internet and covers the costs associated with publication through means other than subscriptions (Lewis, 2012). Shieber (2009) added that scholars write articles to be read—the more access to their articles the better—so one might think that the open-access approach to publishing, in which articles are freely available online to all without interposition of an access fee, would be an attractive competitor to traditional subscription-based journal publishing.

Technology acceptance models or theories are commonly used in studies aiming at predicting and explaining the individual behaviors towards the acceptance and usage of new technologies. In the *Unified Theory of Technology Acceptance and Usage (UTAUT) Model* of Dulle and Minishi-Majanja (2011), it was suggested that attitude, awareness, effort expectancy and performance expectancy were established as the key determinants for the researchers' behavioural intentions of open access usage. These factors should be taken into account in the planning and implementation of open access projects.

Likewise, there are concerns that need to be clarified before any educational institution implements open access publishing—most of which were financial in nature. Over the past several decades, a workable infrastructure has developed to handle the subscription-based mechanism for scholarly journals—publishers to manage logistics and production, subscription agents to handle order processing, library budgets to pay for the subscriptions, overhead from grants to fund those library budgets, and so forth.

Unfortunately, there is no such infrastructure to support the processing-fee model. In the same vein, universities underwrite closed-access journals through the institutional subscriptions that they purchase. Funding agencies do so through the overhead charges that they provide to grantee institutions, a sizable (and specifically negotiated) fraction of which is applied to support of the libraries and thereby subscription fees again. Since both universities and funding agencies are (directly or indirectly) underwriting journal subscriptions, both should be involved in underwriting article-processing fees for open-access journals as well (Kyrillidou, et.al., 2009). This is a common predicament of educational institutions who have been in the publishing business for so long.

In the *Critical Theory of Technology*, Feenberg (1991) argued that the exercise of technical power evokes resistances of a new type immanent to the one-dimensional technical system. Those excluded from the design process eventually notice the undesirable consequences of technologies and protest. Opening up technology to a wider range of interests and concerns could lead to its redesign for greater compatibility with the human and natural limits on technical action. A democratic transformation from below can shorten the feedback loops from damaged human lives and nature and guide a radical reform of the technical sphere. This notion underscore the direct impact of technological innovation even to the scholarly community wherein technology, i.e., electronic journals, play a vital role in the proliferation and dissemination of knowledge.

In the studies of Rowland, Bell and Falconer (1997), it was determined that there are human factors which influence the acceptability of electronic journals to users—the interface, the hypertext structure, the searching and browsing functionalities, and the speed of the network

response. Economic factors that influence the progress of electronic journals include not only the level of prices charged, but also the pricing structures adopted. The continued provision of high-quality scholarly publications to readers in the electronic era will require that publishers provide the needed design quality at prices that are significantly lower than those charged today for printed journals.

But in the case of schools in developing countries, the economics of publications is not so much as a big issue. In the Philippines, a lot of universities were just in the initial stage of making journal publishing a viable academic endeavor. The problem is not on the cost of publication but more on the availability of technology and validity of content. In fact, a lot of researchers believed that the financial side would come later after a stable system of publication will be installed, so that the obvious answer will be the employment of open access publishing applications.

Heylighen (2007) strongly opined that to be able to fully compete with the established market-based system, the still very young open access movement will need to further learn from its experiences, addressing its remaining weaknesses and building further on its strengths. This will in particular require developing better standards and rules, and more powerful software solutions for harnessing stigmergy and allocating recognition and feedback—the main drivers behind the success of open access according to the present analysis.

Another tricky issue is on the factors which increase or decrease scholars' willingness to publish and use articles in open-access journals and discuss how these factors are related to one another. In the *Grounded Theory Approach*, Park (2009) have shown the seven factors (perceived journal reputation, perceived topical relevance, perceived availability, perceived career benefit, perceived cost, perceived content quality, and perceived ease of use) and eight relationships wherein scholars' willingness will be measured.

It was observed that prior experience with and knowledge of open access publishing was a significant factor to motivate scientists to adopt open access publishing in general, but the perceived benefit of being visible was considered more important by tenured scientists than by untenured and not-applicable scientists. The untenured and not-applicable groups perceived the benefits of career matters as a more important factor.

Craig and a group of Harvard researchers (2007) interjected a key question in journal publication, "Do open access articles have greater citation impact?" The last few years have seen the emergence of several open access options in scholarly communication which can broadly be grouped into two areas referred to as 'gold' and 'green' open access (OA).

Early studies showed a correlation between the free online availability or OA status of articles and higher citation counts, and implied causality without due consideration of potential confounding factors, while more recent investigations have dissected the nature of the relationship between article OA status and citations, presenting three non-exclusive postulates for these differences: an open access postulate, a selection bias postulate, and an early view postulate. It was finally shown that after controlling for the early view postulate, the remaining difference in citation counts between OA and non-OA articles is explained by the selection bias postulate. No evidence was found to support the OA postulate per se; i.e. article OA status alone has little or no effect on citations.

With the aforementioned theories—economic, scientific and behavioral—which undermines online publications, this research was intended to shed some light on how journal publishing would be initiated in the most advantageous way at Eastern Visayas State University.

Conceptual Framework

The paradigm in Figure 1 shows the premise of this study that a realistic manner of designing and establishing an Open Journal System can be appropriately conceptualized by (a) determining the profile of respondents comprising of faculty members, students and online experts; (b) conduct of a survey among respondents with regards to the level of awareness, attitude and experiences of implementation; and, (c) the actual design of an Open Journal System for Advanced Education in the university.

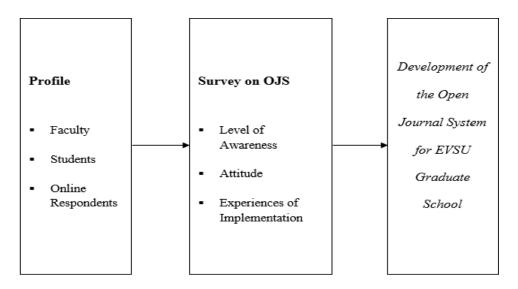


Figure 1. Schematic Diagram of the Development of an Open Journal System (OJS) for Advanced Education in Eastern Visayas State University (EVSU).

Thus, it is envisioned that setting up an Open Journal System in Eastern Visayas State University can bring about efficient, effective and economical processes in publishing journal/technical articles in the Graduate School within the parameters of international peer-review and journal acceptability standards.

Methodology

This study is a qualitative analysis and technological innovation of an open-access program as a platform for online publication of research outputs. It imbibed both descriptive and causal-comparative type of study, requiring the investigator to observe the present conditions then describing the situation that presently exists. The comparison was on the prevailing perception and practices of journal publication in the Graduate School versus the proposed open journal system. This is to know the practicability of whether or not putting into practice OJS in the Graduate School would be beneficial to the institution and its target end-users. The EVSU Graduate School Open Journal System was conceptualized and developed through actual programming and content integration. The outcome is a system for the submission, editing and

publication of researches in the various programs, like those in education, management, rural development and engineering/information technology.

The respondents of the study consisted of faculty members and students of EVSU Graduate School as well as external experts. Fifteen (15) identified regular faculty of the University who have teaching load in advance education as well as lecturers from other agencies or institutions were tapped to provide the extent of their awareness and attitude on "open access" policy and Open Journal System in online publications and the perceived experiences in implementing OJS. The same survey was answered also by one hundred (100) students who came from various degree programs offered in the Graduate School. To put credence to the survey, at least four (4) academicians who are experts in online publications from international universities were asked for their insights.

This study was conducted in the Graduate School of Eastern Visayas State University, Tacloban City. The system was designed and programmed using available content and materials in the University.

The study made use of an instrument which is a modified form of the questionnaire from the original University of Huddersfield Survey related to academic attitudes to open access and institutional journal repositories. Likewise, secondary data and published papers from online sources were utilized to gather information relevant to the objectives of this study.

The questionnaire had four (4) parts. Part I contained items regarding the profile of respondents in terms of age, profession/discipline/line of work, level of research activity and number of researches conducted. Part II determined the level of awareness on Open Access publications. Part III assessed the attitude of respondents on Open Access publications. Part IV elicited the respondent's possible experiences relative to the use of Open Journal System. The researcher adopted the 5-point Likert Scale Model for the respondents' responses, with 5 as the highest value and 1 as the lowest.

The survey instrument of this study was an adoption of the University of Huddersfield Survey related to academic attitudes to open access and institutional journal repositories. Modifications were done with inputs coming from the Dissertation Committee. Thus, the questionnaire was determined to have validity, reliability and the coefficient of consistency.

The researcher sought permission and approval of the Dissertation Committee and the Dean of the Graduate School to administer the research instrument. The questionnaires were given to the target respondents to gather the needed information on the concepts as provided in the problems of this study. The 5-page questionnaire had sets of directions for the respondents to make the corresponding replies.

The data were scored, analyzed, and interpreted using appropriate statistical treatment. To determine the scores of the following variables: age, profession/discipline/line of work, research experience, number of completed researches, level of awareness of Open Access Publications, attitude of Open Access Publications and experiences with Open Journal System users, the percentage distribution, mean and rank were used.

System Analysis and Design

The development of the EVSU-GS Open Journal System consisted of having two major components: systems analysis and systems design. In system analysis more emphasis was given to understanding the details of an existing system or a proposed one and then deciding whether the proposed system is desirable or not and whether the existing system needs improvements. It was

a process of investigating a system, identifying problems, and using the information to recommend improvements to the system.

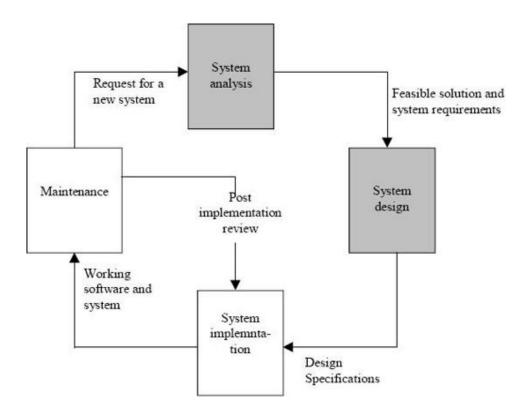


Figure 2. Stages in developing an improved system (the OJS of EVSU Graduate School).

System design on the other hand was the process of planning the proposed system. Analysis specifies what the system should do. Design states how to accomplish the objective. After the proposed system was analyzed and designed, the actual implementation of the system occurred. After implementation, working system will be available and it requires timely maintenance.

Findings

Profile of Faculty Members and Student of the EVSU Graduate School

Eleven (11) or 73% of the faculty members were above middle age (41 – above) and no one was found to belong to the young age bracket (30 and below) while the opposite is true for student-respondents in which 62% or 60 were at young age and 11% were above middle age. In terms of professional discipline, there were six (6) or 40% faculty members who were in the Social Sciences (Education, Management, Rural Development, Behavioral Science) and only 2% belonged to Other Discipline (Mathematics, Information Technology, Engineering), while 48% of students were in Social Sciences also and 12% in Other Disciplines.

There were five (5) or 34% of the faculty members whose experiences in conducting research activities were in the doctorate level and 7% did researches outside their scholastic area, while 74% of student-respondents experienced doing research projects in their masteral level and no one got an experience doing formal research in the post-doctorate level. For the total number of faculty members, fifteen (15) or 33% theses/dissertation were completed and only 2% were on other type of research reports, while among the students, 49% have completed theses and 3% had other type of actual number of research-related outputs, activities and projects.

Level of Awareness of Open Access Publications

The faculty-respondents were cognisant of each of the characteristics of Open Access Publications (OAP), having a classification as much aware with an overall mean of X=3.67. The average mean at 4.42 observation that "There are Open Access search tools such as OAIster, Google Scholar, PKP Search, etc." was interpreted as much aware, while the statement "Open Access journals are available online" obtained an average mean of 4.25, interpreted as much aware also. Faculty members interpreted the statement "Open Access requires that authors pay the publication fee" as being aware with an average mean of 3.25.

The level of awareness of students towards Open Access Publications had an overall mean of X=3.23 classified as aware. They are aware that "Open Access Publications are in online/electronic format" with an average mean of 3.45 interpreted as aware, while being aware also that "There are Open Access search tools such as OAIster, Google Scholar, PKP Search, etc." with an average mean of 3.41 interpreted as aware. The students are aware that "The Bethesda Statement on Open Access Publications (BSOAP) is being supported by research institutions worldwide" having an average mean of 2.97.

Attitude on Open Access Publications

The faculty members of EVSU Graduate School were generally amenable on the idea that researches issued in Open Access journals has become a norm in online publishing, having a classification as favorable with an overall mean of X=3.68. The professors were favorable on the notion that "It is a good idea publishing in Open Access journals" and "Open access policies are beneficial to the scholarly community" with an average mean of 4.33 and 4.25, respectively. On the statement that "Open Access publications undergo a thorough peer-review process prior to its publications", the faculty-respondents were favorable with an average mean of 3.08.

The students' attitude towards Open Access Publications was positive and constructive, having an overall mean of X=3.98 interpreted as favorable. The statements "Open access policies are beneficial to the scholarly community" and "It is a good idea publishing in Open Access journals" had an average mean of 4.31 and 4.24, respectively, interpreted as favorable. Meanwhile, the students were favorable also to the idea that "Open Access publications cannot be supported with reasonable funding from reputable agencies", having an average mean of 3.62.

Experiences of Open Journal System Users

The faculty members understood the implementation of Open Journal System in their institution, with an overall mean of X=3.56 classified as often experienced. The statements "Open Journal System enables researches to get to know more researches of varied disciplines" and

"Publishing articles is made easy with Open Journal System" had average mean of 4.25 and 4.17, respectively interpreted as often experienced. There were those who indicated that "I have some publications in Open Journal System outlets" with an average mean of 2.75 interpreted as sometimes experienced.

The student-respondents were not so familiar with the implementation of Open Journal System in Eastern Visayas State University, having an overall mean of X=2.83 interpreted as sometimes experienced. Both statements "Open Journal System enables researches to get to know more researches of varied disciplines" and "Open Journal System publication is usually my first priority when sourcing for materials for my work" had an average mean of 3.34 and 3.14 respectively interpreted as sometimes experienced. Certain respondents indicated that they rarely experienced this statement "I have some publications in Open Journal System outlets", with an average mean of 2.11.

The views and opinion of Open Journal System users from various universities in other countries were collected from Researchgate.net website. The four (4) experts/professors responded and detailed how the Open Journal System was implemented, the extent of awareness and distinct attitude of faculty members and students on the "open access" policy of published materials as well as the OJS as a journal publishing tool. The respondents discussed also various problems and concerns they encountered when OJS was implemented. However, they cited some "best practices" they did which led to the successful establishment of the OJS in support of online publication of research materials.

Table 1. Narrative Responses of International Experts Regarding Experiences on Open Journal System (OJS)

Respondent	Experiences on OJS
Dewald Van Niekerk Head of African Center for Disaster Studies North West University South Africa	We have used OJS for the past 3 years with great success for our internationally peer-reviewed journal Jamba: Journal of Disaster Risk Studies (see www.jamba.org.za). We actually are using a third party (OASIS) who manages most of the admin process for us. We found that OJS takes up a lot of time in terms of its management and I would rather not have my researchers spending time on this issue. It works fairly easy once you get to know it but it is not very intuitive. In terms of open access, well you can go have a look at the number of times articles are downloaded, this speaks for itself. In our field of study I cannot understand how we even dare lock our knowledge behind paid journal walls!
Martin Ebner	
Head of OU Educational Technology Department Graz University of Technology Austria	We are using the OJS for four different journals at our university - one of them you will find here http://zfhe.at. It's a little bit tricky in the first run, but once you get it, the whole process is running very smoothly. We developed also a mobile app for it, so every article is available on mobiles.
Jorge Polanco Cortes	
Vicerrectoría de Investigación University of Costa Rica Costa Rica	I am the Portal of Journals coordinator in the University of Costa Rica. The University is using OJS for all of the Journals in the institution (http://revistas.ucr.ac.cr) since 2 years ago. In my opinion, the key of success is that our collaborators work in accompanying and training the editors, for them to feel comfortable and confident using the system. The journals have wide international visibility and indexations. According to

Webometrics, the portal is one of the bests regarding visibility and size. We are a small group of people constantly researching about scientific communication. Also we work with the institutional repository and promoting open access policies in the University. On the other hand, the quality of the journal depends on the editorial board, but the University is helping to reduce the workload. In brief, based on our experience with OJS, the key of success is to keep the teamwork researching about the subject and also training people regarding open access so that they will know both the theoretical and the technical scopes.

Gonzalo L. Villareal

Servicio de Difusión de la Creación Intelectual (SeDiCI) National University of La Plata Argentina We use OJS at Universidad Nacional de La Plata since 2008, when we launched the Portal de Revistas (http;//revistas.unlp.edu.ar). In our case, we give training when they first contact us (mainly workshops), and we have prepared some documents for them to get started to the "most interesting" parts: journal configuration, styling, etc. Before any workshop, we try to identify if the (future) editors need support with OJS only, or if the need to learn how to run a scientific journal, beyond the software used behind. We give support to journal editors by email and by phone, and we constantly monitor each journal in our portal. Even though we give access to journal managers, we try to deal with as many technical issues as possible: interoperability, journal configuration (that means: to make it as easy as possible for them). Lastly, we work very close with SEDICI, our institutional repository (http://sedici.unlp.edu.ar). Together we talk to editors about open access, impact, dissemination and preservation (all fields that SEDICI guys already manage very well).

Design of the Open Journal System for EVSU Graduate School

The system was designed to reduce the time and energy devoted to the clerical and managerial tasks associated with editing a journal, while improving the record keeping and efficiency of editorial processes. It sought to improve the scholarly and public quality of journal publishing through a number of innovations, from making journal policies more transparent to improving indexing.



Figure 3. The main window of "Treatise", the proposed EVSU Graduate School Open Journal System, with the first featured publication: International Journal of Educational Leadership (IJEL).

The EVSU-GS OJS included the following features: (a) OJS is installed locally and locally controlled; (b) editors configure requirements, sections, review process, etc.; (c) online submission, double-blind review, and management of all content; (d) subscription module with delayed open access and non-open access options; (e) comprehensive indexing of content; (f) reading Tools for content, based on field and editors' choice; (g) e-mail notification and commenting ability for readers; (h) complete context-sensitive online Help support; and, (i) payments module for accepting journal fees, donations, etc.

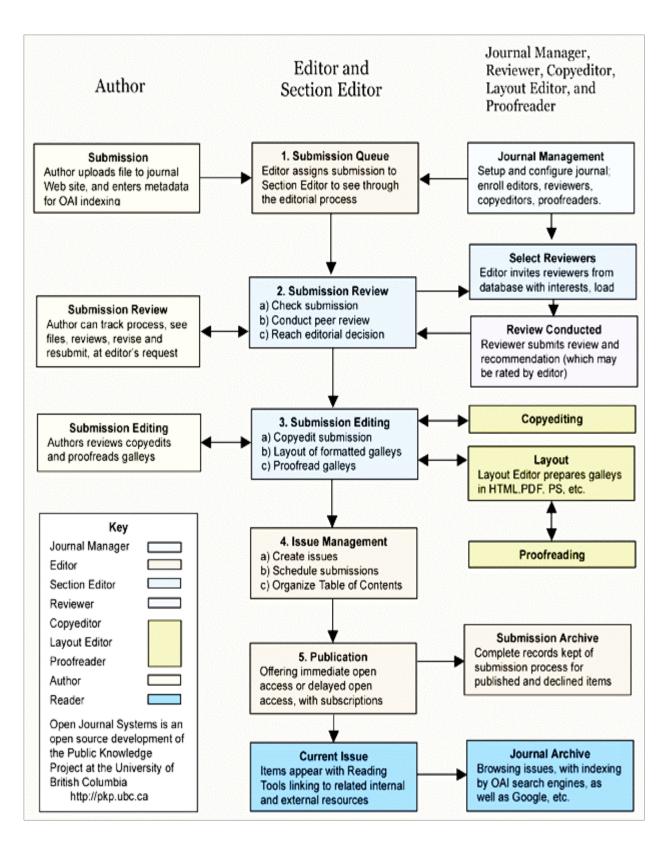


Figure 4. The EVSU-GS "Treatise" Submission, Editorial and Publication Processes, as Adopted from the Public Knowledge Project, Open Journal Systems.

The EVSU-OJS was designed as a journal and web site management and publishing system. It covers all aspects of online journal publishing, from establishing a journal website to operational tasks such as the author's submission process, peer review, editing, publication, archiving, and indexing of the journal. OJS also helps to manage the people aspects of organizing a journal, including keeping track of the work of editors, reviewers, and authors, notifying readers, and assisting with the correspondence.

The OJS is flexible and scalable. A single installation of OJS can support the operation of many journals. Each journal has its own unique URL as well as its own look and feel. OJS can enable a single editor to manage all aspects of a journal and the journal's website, or OJS will support an international team of editors with diverse responsibilities for a journal's multiple sections.

The *OJS supports the principle of extending access*. This system is intended not only to assist with journal publishing, but to demonstrate how costs of journal publishing can be reduced to the point where providing readers with "open access" to the contents of the journal may be a viable option.

The Open Journal System was meant to facilitate the development of open access, peer-reviewed publishing, providing the technical infrastructure not only for the online presentation of journal articles, but also an entire editorial management workflow, including article submission, multiple rounds of peer-review, and indexing. The Open Journal System, as the basic platform of the proposed technological innovation, covers all aspects of online journal publishing, from establishing a journal website to operational tasks such as the author's submission process, peer review, editing, publication, archiving, and indexing of the journal. OJS also helps to manage the people aspects of organizing a journal, including keeping track of the work of editors, reviewers, and authors, notifying readers, and assisting with the correspondence.

"Treatise", the designed prototype, is an Internet-based journal publication system of the EVSU Graduate School, which was designed with the intent of enabling the University to respond to the demand of making its literary pieces, scientific researches and technical papers be published and cited in scholarly venues and journals.

The development and implementation of the OJS in advanced education is expected to strengthen the research capability of Graduate School faculty and students. Thus, the Eastern Visayas State University as an institution of higher learning will be at par with national and international universities when it comes to research publication and technological commercialization, thus, ushering quality education.

Conclusions

The study focused on developing an Open Journal System (OJS) for advanced education in Eastern Visayas State University, Philippines. Thus, in the light of the empirical findings of the survey, it can be concluded that the faculty members are above middle age, majority are in the field of Social Sciences (Education, Management, Rural Development, Behavioral Science) with experience in conducting research activities in the doctoral level and having completed theses/dissertations, while students are at young age, most of which are in Social Sciences also and doing research projects in their masteral level.

Faculty-respondents frequently observe the characteristics of Open Access Publications (OAP) while the students moderately observe how OAP are being implemented in Eastern Visayas State University.

The faculty members and students of EVSU Graduate School generally agree that researches issued in Open Access journals is becoming a norm in online publishing and consequently beneficial to the scholarly community.

The implementation of Open Journal System is often experienced by EVSU professors while students sometimes have experienced the way OJS enables the publication of researches from various disciplines. Users of OJS in other countries encountered problems and concerns, but they have learned some "best practices" which led to the success in online publication of research materials.

The EVSU-GS Open Journal System is designed for the development of open access, peer-reviewed publishing, providing the technical infrastructure not only for the online presentation of journal articles, but also an entire editorial management workflow, including article submission, multiple rounds of peer-review, and indexing.

Recommendations

Based on the result of the study, it was determined that there is a need to conduct orientation-seminars on basic and applied research within the context of the current technological innovations among faculty members and students of the Graduate School regardless of age and field of expertise for them to appreciate the connection between the importance of doing research and the enhancement of their studies or profession.

Research culture must be cultivated in the Graduate School, with its agenda aligned to the development thrust of the University. The proliferation of research activities, publications and dissemination can be efficiently implemented with the adoption as an institutional policy of the Open Access Publications (OAP) system.

The faculty members and students must be acquainted with Open Access Journals, its sources and availability, including the training of technical skills on how its contents can be utilized in different research activities.

The practice of research publications can be integrated in the curriculum to enable faculty members and students got a first-hand experience of having their research outputs be published online through Open Journal System. The University can adopt the best practices of OJS users in other international higher educational institutions to mitigate possible problems and concerns in its implementation.

The design and development of an Open Journal System can be an opportunity for research outputs of the EVSU Graduate School to be published in an open-access and peer-reviewed platform. The online mode of editorial management workflow adds value to the efficiency, effectiveness and economical nature of research publications, dissemination and indexing.

An office with a mandate to maintain the Open Journal System and coordinate with Editorial Boards of various journals in the University may be established for purposes of proper management and sustainability of online publications.

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