Abstract – The *Engineering Design Graphics Journal* transitioned from being a print-only journal to being an online-only journal aided by Open Journal Systems. Key to the success of any journal in transition includes ensuring authors can continue negotiating the submission, editorial, and publication process; reviewers can continue evaluating manuscripts; and editors can continue working with authors and reviewers with relative ease. Open Journal Systems’ integrated submission, editorial, and publication process made this possible.

*Keywords:* Engineering Design Graphics Journal, Open Journal Systems, Online Journal, Case Study.

**INTRODUCTION**

Prior to the publication of volume (vol) 73, all issues of the *Engineering Design Graphics Journal* (the Journal) were printed and physically mailed to those entitled to receive issues. As well, and up through vol 73 number (no) 2, all manuscripts were submitted as an attachment to an email message and the editorial process was handled by means of emailing attachments: a rather cumbersome process at the very least.

On Aug 24, 2009, following an eighteen month self-study, the online-only *EDGJ* was launched (B. Yang, personal communication, August 24, 2009)—see Figure 1. The self-study began Feb 2, 2008 when the then Engineering Design Graphics Division Executive Committee Chair, Kathryn Holliday-Darr, issued a challenge in response to division member concerns and complaints: “…make suggestions on how to fix the problem” (K. Holliday-Darr, personal communication, February 2, 2008). One of the major concerns was for the sustainability of the Journal. The purpose of this paper was to report on the transitioning milestones, from a print-only journal to an online-only journal, and to describe the *EDGJ's* new normal way of doing business.

**The Self-Study**

Following the Feb 2, 2008 challenge, an online dialogue took place among division members regarding the immediate future of the Journal. During the division’s 2008 annual conference, a five member ad-hoc committee was formed to look into the various options for publishing an online-only journal. At the division’s 63rd annual mid-year conference, La Verne Abe Harris, the Journal’s editor and the division’s director of publications, proposed adoption of Open Journal Systems (OJS) as the means for publishing the Journal (L. A. Harris, personal communication, January 4, 2009) based on recommendations by the five member ad-hoc committee. By the division’s 2009 annual conference, and because of support provided by East Carolina University and the availability of a graduate assistant, an OJS online-only journal test site had been launched and six issues of the Journal, including the two most recent issues, vol 73 nos 1 and 2, had been posted (R. A. Chin, personal communication, June 8, 2009). At the conference, Robert A. Chin assumed responsibility as the division’s director of publications and editor of the Journal. During the division’s 64th mid-year conference, in addition to reporting that the Journal had been officially launched, it was reported that a total of 27 issues of the Journal had been posted (R. A. Chin, personal communication, October 10, 2009).

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2 Department of Technology Systems, College of Technology and Computer Science, East Carolina University, Greenville, NC 27858-4353, Phone: 252-328-9648, Email: chinr@ecu.edu
While the Journal is an online-only journal, authors, reviewers, and editors continue negotiating the submission, review, and publication process with the aid of email during the one year transition period. It is the belief that key to a successful transition is getting authors and reviewers trained and acclimated to the new normal.

Open Journal Systems

Developed by the Public Knowledge Project (PKP), OJS is an integrated journal management and publishing system whose source code is available to the general public with relaxed or non-existent copyright restrictions. PKP is a non-profit research initiative. Its partners include the Faculty of Education at the University of British Columbia, the Canadian Centre for Studies in Publishing at Simon Fraser University, the Simon Fraser University Library, and Stanford University. PKP’s mission is to improve the scholarly and public quality of research.

OJS, while launched prior to the Budapest Open Access Initiative, is grounded in the second of two complementary strategies intended to achieve open access to scholarly journal literature: “scholars need the means to launch a new generation of journals committed to open access, and to help existing journals that elect to make the transition to open access” [1]. Among the features associated with OJS are the following:

- OJS is installed locally and locally controlled
- editors configure requirements, sections, review process, etc
- online submission and management of all content
- subscription module with delayed open access options
- comprehensive indexing of content part of global system
- reading Tools for content, based on field and editors’ choice
- email notification and commenting ability for readers

Figure 1. The Engineering Design Graphics Journal homepage—www.edgj.org.
OJS’s Submission, Editorial, and Publishing Process

OJS’s integrated submission, editorial, and publication process appears in Figure 2 [3]. For the author, manuscript submission involves five steps: (1) starting the submission, (2) entering the submissions metadata, (3) uploading the submission, (4) uploading supplementary files, which is an optional step but must be negotiated never-the-less, and (5) confirming the submission. Once the manuscript has been uploaded, it is scheduled for review by the editor assigned responsibility for administering the review process. That is, (1) the editor initiates peer review, (2) the reviewer conducts the review, (3) the editor records the decisions, and once the manuscript is submitted, (4) the manuscript undergoes submission editing—copyediting, scheduling, layout, and proofreading, and (5) the manuscript is published. OJS in effect serves as the medium connecting the editor, reviewer, and author, where previously email connected the editor, reviewer, and author. OJS also serves as a repository for manuscripts and other associated documents.
THE PREVIOUS *EDGJ* REVIEW PROCESS

One of the last significant changes the *EDGJ* made to the submission process was when it adopted electronic mail (aka email) as the means for corresponding and eliminated the requirement for sending multiple paper copies of the manuscript via traditional post. With the aid of email, authors would submit Microsoft Word (.doc) files as attachments to the associate editor. Files in .pdf format were also accepted if the authors did not have access to Word or if there were formatting or file size issues. File size was frequently a potential problem because some of the email systems used by members of the review board and editorial staff restricted the size of attachments.

After receiving an electronic submission, the associate editor sent an email to the author(s) acknowledging receipt of the manuscript, and then completed the following tasks:

- entered the information about the author(s) and submitted document into a spreadsheet for record keeping purposes
- removed personally identifying information, if any, from the document(s) to ensure a blind review
- prepared a standard review form to send to each individual reviewer
- emailed the review form and document(s) to each reviewer, and gave a suggested due date for completion
- when all the reviews were completed, compiled the feedback into an email and informed the author(s) of the decision to: accept the article, suggest revision and resubmission, or reject the article
- if the article was accepted, the author(s) were informed of a due date for the finalized article
- after assessing the finalized document for items such as APA reference format, graphics file format, etc., sent the article text, any accompanying graphics, and copyright transfer form to the editor for publication

The associate editor was in the past and shall remain the primary contact for authors through the entire review process and often must field questions about the review process itself, whether reviews can be debated, and whether reviewers can be contacted to discuss feedback.

Creating New Review Forms

In the previous review process, a standard form that had been created in Microsoft Word was sent to reviewers with information such as the title of the document, name of the reviewer and due date of the review filled in by the associate editor. The form was protected and had check boxes for items such as accept, reject, or revise and resubmit. There were specific evaluation criteria including significance of topic, quality of ideas, and methodology of design, that had check boxes for ranking from excellent to weak or N/A. Also included were text boxes where reviewers could write specific comments about each evaluation criteria or to include notes to the editorial staff.

Online Journal Systems has a default review form which consists of only two text boxes, one is “for author and editor,” and the second is “for editor.” There is also the option to create custom forms. After discussion among the reviewers and editorial staff, the consensus was to create a custom form in OJS that contained all the essential elements of the previous Microsoft Word review form. The OJS interface for creation of forms is user friendly and allows for the creation of a variety of items including: single word text box, single line text box, extended text box, check box, radio button, and drop-down box. Items can also be designated as required fields. If desired, multiple versions of review forms can be created and editors can decide which form to use when assigning a review.

THE NEW *EDGJ* REVIEW PROCESS

After the official launch of the online only *Engineering Design Graphics Journal*, authors must upload their manuscripts via the Journal website. Assistance will be provided if needed. The individual making the submission, usually the lead author, is required to create a login ID and password if they are not already a member of the Division or have not previously created a login—see Figure 3. Once the manuscript has been submitted, the author is notified by means of an OJS generated email of a successful upload and the associate editor is able to view the document and assign it to the appropriate reviewers—see Figure 4.
Figure 3. The EDGJ Author Registration page.
To help ensure a blind review, author instructions on the website include information on preparing the document to remove personal information. Also, once the manuscript is uploaded, the manuscript is assigned a random name not associated with the authors’ names or university affiliation. When a member of the review board is assigned a document, they receive an OJS generated email. The reviewer then logs in to the EDGJ website and indicates whether or not they will be able to review the manuscript within the given time frame. This in turn generates an OJS email to the associate editor and updates the information online about the articles that are currently under review and by whom. There is also an option that can be set by the EDGJ staff that allows for automatic reminders to be sent if a review is not completed by the due date.

When a reviewer logs in to the EDGJ website, they should select the User Home option. This will take the reviewer to a page that allows them to select their status as a reviewer. The reviewers’ page contains all the necessary information for completing reviews including:

- the title, abstract, and submission editor of the article
- the review schedule
- a list of all the review steps
- the review form to complete

This page, with all the review steps completed, is shown in Figure 5.

In the previous process, along with filling out the standard form, many reviewers also made comments in the submitted Word document. The reviewers still have the option of making comments directly in the Word document and uploading the edited file to the website when they complete their review. When the results of the review are sent to the authors, editors have the option of either uploading the entire completed form with feedback as submitted by the individual reviewers, or editing and compiling all the comments as was done previously. Reviewers in the past occasionally made comments intended for the editor only; the comments were not intended for the authors. These specific comments are never forwarded and reviewers can continue commenting directly to the editors. The online review form has a text box specifically for such comments.

When the reviews are complete and the associate editor has recorded the final decision regarding the status of the submission, an email is sent to the corresponding author. What the authors see on the EDGJ webpage when a review is complete appears in Figure 6.
Figure 5. Reviewers’ screen showing submission to be reviewed, review schedule, and review steps.

Figure 6. Author’s review screen.
Copyediting, Proofreading, and Publication

Accepted articles are copyedited, proofed, and prepared for publication by the editor and their staff. Once a manuscript has been accepted for publication, the author will receive a copy of their manuscript for copyediting. After logging in, they will click on the “Queued for Editing” status link — see Figure 7. This is where major changes can be made before publication. Once the changes have been made, the revised edition is uploaded, and the editor with copyeditor responsibility is notified.

![Figure 7. Editing manuscript.](image)

All article revisions completed by the authors prior to publication are submitted online. Proofs are provided to the authors before publication. Instead of this revision and proofing process being completed via email as was done previously, it is now done through and with the aid of OJS.

When the manuscript is published, the author’s “Summary” page will reflect this status — see Figure 8.

CONCLUSION

By means of this integrated online approach, the EDGJ sought to improve the scholarly and publication quality through a number of innovations, from making journal policies more transparent to improving indexing. It is anticipated that this integrated online approach to processing manuscripts and delivering the EDGJ will reduce the time and energy devoted to the clerical and managerial tasks associated with producing the EDGJ. For example, one of the most time consuming tasks of the review process was preparing the submissions for review. Every document needed to be checked for personal data and often renamed to ensure a blind review, individual review forms with document titles, review dates and so on had to be filled out for each reviewer, emails composed, and documents attached. Many times, even before a document could be sent for review it had to be edited due to email attachment size problems.

With the implementation of the OJS website, most of these steps are automated saving time and allowing for greater transparency of the review process. The new process will also be of assistance to the authors as they are able to log into the website at any time and track the status of their submissions and know where in the review process their manuscript is. Previously, the only way for an author to check the status was to email the associate editor and ask for an update. It is also anticipated that overall record-keeping and efficiency of editorial processes will improve.

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#53 SUMMARY

## SUBMISSION

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## SUBMISSION METADATA

**Name**: Robert A Chan

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## TITLE AND ABSTRACT

**Title**: Publishing in the Online Engineering Design Graphic Journal

**Abstract**: The purpose of this paper will be to examine potential EDG journal with their responsibilities as they negotiate the submission, review, edited, and publication process. Specifically, the paper will address how authors get started, how to submit an article, how to respond to reviewers, copyrighting, and processing. In addition, the paper will address how the editor will intervene to assist authors and editors for improving the effectiveness of the expense submission process.

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**REFERENCES**


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Nancy E. Study is an associate professor in the Department of Engineering and Technology at Virginia State University, where she has taught since 2002. She is an active member of the Engineering Design Graphics Division of ASEE and has served as the Associate Editor of the *Engineering Design Graphics Journal* since 2006. Study has served as a reviewer of conference abstracts and papers for the Engineering Design Graphics Division’s Annual and Mid-Year conferences, along with serving on multiple NSF review panels. Her research interests include haptics and visualization.

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Robert A. “Bob” Chin is a full professor in the Department of Technology Systems, East Carolina University, where he’s taught since 1986. He is the current Director of Publications for the Engineering Design Graphics Division and Editor for the *Engineering Design Graphics Journal*. Chin has served as the Engineering Design Graphics Division's annual and mid-year conference program chair and he has served as a review board member for several journals including the *EDGJ*. He has been a program chair for the Southeastern Section and has served as the Engineering Design Graphics Division's vice-chair and chair and as the Instructional Unit's secretary, vice-chair, and chair.