

# Manuscript Publication Aided by Open Journal Systems: A Case Study

Nancy E. Study<sup>1</sup> and Robert A. Chin<sup>2</sup>

**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 63<sup>rd</sup> 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 64<sup>th</sup> 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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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.



Figure 1. The *Engineering Design Graphics Journal* homepage—[www.edgj.org](http://www.edgj.org).

## 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

- complete context-sensitive online Help support [2]

## 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.

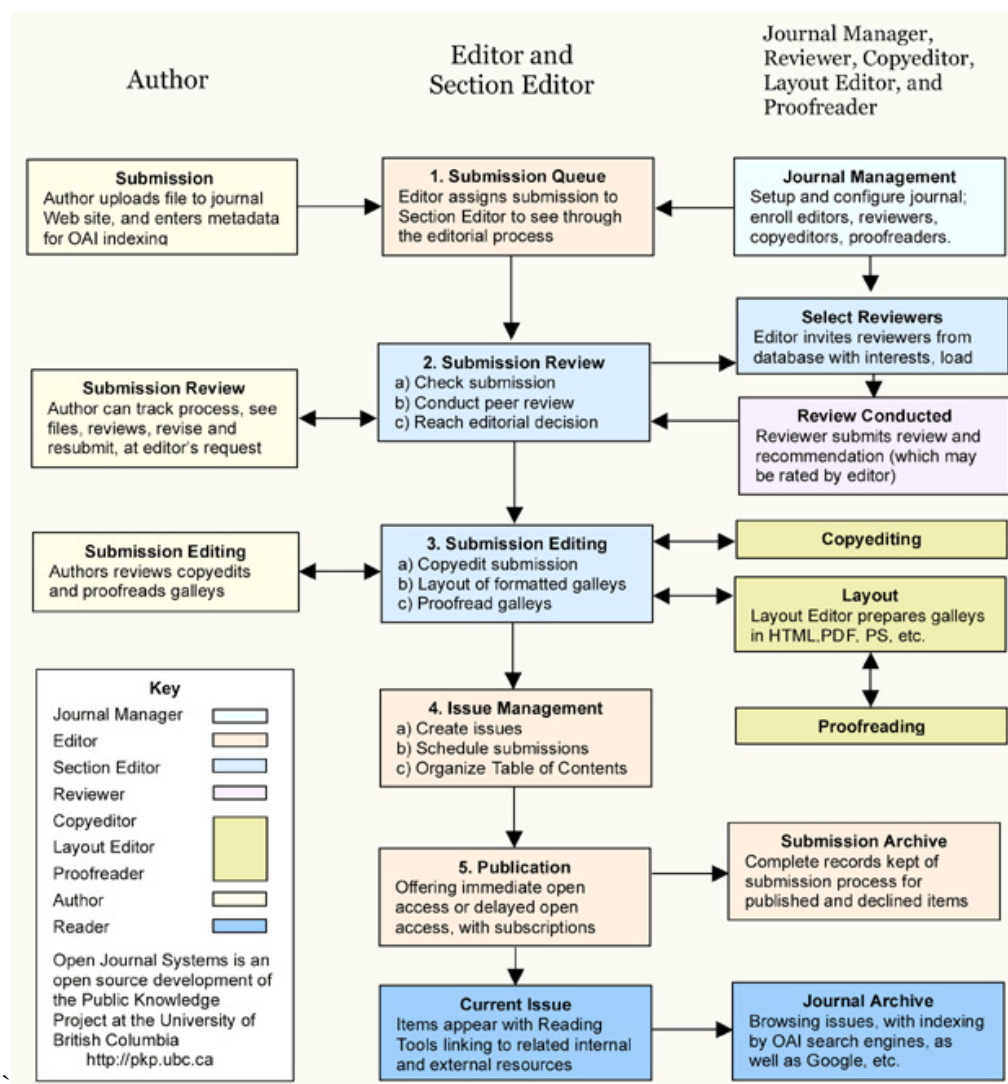


Figure 2. The OJS submission, editorial, and publication process.

## 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.

## REGISTER

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Fill in this form to register with this journal.

[Click here](#) if you are already registered with this or another journal on this site.

### PROFILE

Username*	<input type="text"/>	
		The username must contain only lowercase letters, numbers, and hyphens/underscores.
Password*	<input type="password"/>	
		The password must be at least 6 characters.
Repeat password*	<input type="password"/>	
Salutation	<input type="text"/>	
First name*	<input type="text"/>	
Middle name	<input type="text"/>	
Last name*	<input type="text"/>	
Initials	<input type="text"/> Joan Alice Smith = JAS	
Gender	<input type="radio"/> M <input type="radio"/> F	
Affiliation	<input type="text"/>	
Signature	<div><div></div><div></div></div>	
Email*	<input type="text"/>	<a href="#">PRIVACY STATEMENT</a>
URL	<input type="text"/>	
Phone	<input type="text"/>	
Fax	<input type="text"/>	
Mailing Address	<div><div></div><div></div></div>	
Country	<input type="text"/>	
Bio statement (E.g., department and rank)	<div><div></div><div></div></div>	
Confirmation	<input checked="" type="checkbox"/> Send me a confirmation email including my username and password	
Register as	<input checked="" type="checkbox"/> Reader: Notified by email on publication of an issue of the journal. <input type="checkbox"/> Author: Able to submit items to the journal.	
<div><div>Register</div><div>Cancel</div></div>		

\* Denotes required field

### PRIVACY STATEMENT

The names and email addresses entered in this journal site will be used exclusively for the stated purposes of this journal and will not be made available for any other purpose or to any other party.

**Figure 3. The *EDGJ* Author Registration page.**

EDITOR

[Submissions](#)  
[Unassigned \(0\)](#)  
[In Review \(1\)](#)  
[In Editing \(0\)](#)  
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[Issues](#)  
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SUMMARY REVIEW EDITING HISTORY

SUBMISSION

Authors

1 M New-Author

Title

A Comparison of Test Scores of Minority vs. Non-Minority Students on the Purdue Spatial Visualization Test: Visualization of Rotations

Section

Articles

Editor

Nancy Study

Review Version

99-387-1-RV.DOC 2009-07-24

Upload a revised Review Version

Supp. files

None

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PEER REVIEW

ROUND 1

[SELECT REVIEWER](#)
[VIEW REGRETS, CANCELS, PREVIOUS ROUNDS](#)

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REVIEWER A

NANCY STUDY

[CLEAR REVIEWER](#)

Review Form

Engineering Design Graphics Journal Review Form

[SELECT REVIEW FORM](#)

[CLEAR REVIEW FORM](#)

REQUEST	UNDERWAY	DUE	ACKNOWLEDGE
	—	2009-08-21	

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REVIEWER B

ROBERT CHIN

[CLEAR REVIEWER](#)

Review Form

Engineering Design Graphics Journal Review Form

[SELECT REVIEW FORM](#)

[CLEAR REVIEW FORM](#)

REQUEST	UNDERWAY	DUE	ACKNOWLEDGE
	—	2009-08-23	

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EDITOR DECISION

Select decision

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

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.

USER

You are logged in as...

autudy

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REVIEWER

Submissions

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Archive (1)

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#99 REVIEW

SUBMISSION TO BE REVIEWED

Title	A Comparison of Test Scores of Minority vs. Non-Minority Students on the Purdue Spatial Visualization Test: Visualization of Rotations
Journal Section	Articles
Abstract	Minority subjects enrolled in an introductory engineering drawing class at a historically black university were administered the Purdue Spatial Visualization Test: Visualization of Rotations. The scores for the minority group were statistically significantly lower than scores achieved by primarily non-minority students at a majority serving institution. Other differences in the test subjects, aside from minority status, were academic background and the requirements of the different universities for admission into the academic programs. This paper explores potential reasons for the differences in visualization test scores based on previous academic preparation of the subjects.
Submission Editor	Nancy Study
Submission Metadata	<a href="#">VIEW METADATA</a>

REVIEW SCHEDULE

Editor's Request	2009-07-26
Your Response	2009-07-26
Review Submitted	2009-07-26
Review Due	2009-08-21

REVIEW STEPS

1. Notify the submission's editor as to whether you will undertake the review.  
Response Accepted
2. Click on file names to download and review (on screen or by printing) the files associated with this submission.  

Submission Manuscript	99-387-1-RV.DOC	2009-07-24
Supplementary File(s)	None	
3. Click on icon to fill in the review form.  
Review Form
4. In addition, you can upload files for the editor and/or author to consult.  
Uploaded files None
5. Select a recommendation and submit the review to complete the process. You must enter a review or upload a file before selecting a recommendation.  
Recommendation **Accept Submission** 2009-07-26

The Engineering Design Graphics Journal serves as the official journal of the American Society for Engineering Education, Engineering Design Graphics Division and provides a professional publication for educators and industry personnel associated with activities in engineering, technology, descriptive geometry, CAD, and any research related to visualization and design.

Manuscripts submitted for publication are subject to peer review by the EDG Journal editorial review board. The views and opinions expressed herein are those of authors and do not necessarily reflect the policy or the views of the EDGD.

Figure 5. Reviewers' screen showing submission to be reviewed, review schedule, and review steps.

AUTHOR

Submissions

Active (1)

Archive (0)

New Submission

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By Author

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SUMMARY

REVIEW

EDITING

SUBMISSION

Authors	IMNew-Author
Title	A Comparison of Test Scores of Minority vs. Non-Minority Students on the Purdue Spatial Visualization Test: Visualization of Rotations
Section	Articles
Editor	Nancy Study

PEER REVIEW

ROUND 1

Review Version	99-387-2-RV.DOC	2009-07-26
Initiated	2009-07-26	
Last modified	2009-07-26	
Uploaded file	None	

EDITOR DECISION

Decision	Accept Submission	2009-07-26
Notify Editor	<input type="button" value="E"/> Editor/Author Email Record	<input type="button" value="R"/> 2009-07-26
Editor Version	99-388-1-ED.DOC	2009-07-26
Author Version	None	
Upload Author Version	<input type="button" value="Browse"/>	<input type="button" value="Upload"/>

The Engineering Design Graphics Journal serves as the official journal of the American Society for Engineering Education, Engineering Design Graphics Division and provides a professional publication for educators and industry personnel associated with activities in engineering, technology, descriptive geometry, CAD, and any research related to visualization and design.

Manuscripts submitted for publication are subject to peer review by the EDG Journal editorial review board. The views and opinions expressed herein are those of authors and do not necessarily reflect the policy or the views of the EDGD.

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.

Home > User > Author > Active Submissions

ACTIVE SUBMISSIONS

ACTIVEARCHIVE

ID	MM-DD SUBMIT	SEC	AUTHORS	TITLE	STATUS
53	06-25	ART	Chin	PUBLISHING IN THE ONLINE ENGINEERING DESIGN GRAPHIC JOURNAL	QUEUED FOR EDITING

1 - 1 of 1 Items

START A NEW SUBMISSION

[CLICK HERE](#) to go to step one of the five-step submission process.

**Figure 7. Editing manuscript.**

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.

## ACKNOWLEDGEMENTS

The authors would like to thank our ad-hoc committee colleagues, Kathryn Holliday-Darr, Aaron Clark, and Jon Duff; La Verne Abe Harris, the former *EDGJ* editor and Engineering Design Graphics Division director of publications; and the *EDGJ* review board members, Holly Ault, Ron Barr, Ted Branoff, Aaron Clark, Nathan Hartman, James Leach, Dennis Lieu, James Shahan, Shana Smith, Mike Stewart, and Mostafa Tossi. Finally, the online-only *EDGJ* is a reality as a result of support provided by East Carolina University; Biwu Yang, Research & Development, ECU Academic Outreach; Blake Smith, ECU Academic Outreach; and Cody Skidmore, an ECU graduate assistant and the Journal’s Web Production Manager.





## #53 SUMMARY

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[SUMMARY](#)   [REVIEW](#)   [EDITING](#)

### SUBMISSION

Authors	Robert A Chin
Title	Publishing in the Online Engineering Design Graphic Journal
Original file	<a href="#">53-207-1-SM.DOC</a> 2009-06-25
Supp. files	None
Submitter	Robert A Chin 
Date submitted	June 25, 2009 - 08:50 PM
Section	Articles
Editor	Robert Chin 
Abstract Views	0

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### STATUS

Status	Published   Vol 66, No 3 (2002): Autumn
Initiated	2009-06-25
Last modified	2009-06-25

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### SUBMISSION METADATA

#### AUTHORS

Name	Robert A Chin 
Affiliation	East Carolina University
Country	United States
Bio statement	—

Principal contact for editorial correspondence.

#### TITLE AND ABSTRACT

Title	Publishing in the Online Engineering Design Graphic Journal
Abstract	The purpose of this paper will be to familiarize potential EDGJ authors with their responsibilities as they negotiate the submission, review, editorial, and publication process. Specifically, the paper will address how authors get started, how to submit an article, how to respond to reviews, copyediting, and proofreading. In addition, the paper will address how the editor will intervene to assist authors and options for improving the effectiveness of the in-place submission process.

#### INDEXING

Language	en
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#### SUPPORTING AGENCIES

Agencies	National Science Foundation
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**Figure 8. Author summary page—published manuscript.**

## REFERENCES

- [1] Open Society Institute. (2001). *Budapest Open Access Initiative*. Retrieved November 21, 2009, from <http://www.soros.org/openaccess/read.shtml>
- [2] Public Knowledge Project. (n.d.a). *Open Journal Systems*. Retrieved November 21, 2009 from <http://pkp.sfu.ca/?q=ojs>
- [3] Public Knowledge Project. (n.d.b). *OJS Editorial and Publishing Process*. Retrieved November 21, 2009, from <http://www.edgj.org/index.php/EDGJ/about/aboutThisPublishingSystem>

**Nancy E. Study**

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.

**Robert A. Chin**

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.