

**J**OURNAL  
**O**NLINE  
**S**UBMISSION  
**S**YSTEM

## **Journal Online Submission System (jOSS)**

<http://journal.international.ucla.edu>

International Institute  
University of California, Los Angeles

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## Project Title

### **jOSS - Journal Online Submission System**

An online application to manage the academic paper submission and publishing process.

## Submitters

### **UCLA International Institute**

#### **Kaya Menteshoglu, Ph.D.**

*Information Technology Manager & Senior Programmer, UCLA International Institute*

[Kaya@international.ucla.edu](mailto:Kaya@international.ucla.edu)

#### **Susan Bauckus**

*Senior Editor, UCLA Center for World Languages*

[SBauckus@international.ucla.edu](mailto:SBauckus@international.ucla.edu)

#### **Lavinia Boykin, M.B.A**

*Database Programmer, UCLA International Institute*

[Lavinia@international.ucla.edu](mailto:Lavinia@international.ucla.edu)

## Project Team Members

#### **Kaya Menteshoglu, Ph.D.**

*Project Manager and Senior Developer*

#### **Susan Bauckus**

*Content Designer*

#### **Lavinia Boykin, M.B.A**

*Database Developer*

#### **Natalie Davidson**

*Developer*

## Relevant Website Links

jOSS - Journal Online Submission System: <http://journal.international.ucla.edu>

Heritage Language Journal Homepage: <http://hlj.ucla.edu>

African Arts Journal Submission System: <http://africa.international.ucla.edu>

African Arts Homepage: <http://www.international.ucla.edu/africa/africanarts/index.asp>

Language Flagship Results 2012 Submission System: <http://flagshipresults2012.international.ucla.edu>

Description of Flagship Results 2012 Meeting: <http://www.thelanguageflagship.org/business/special-events/aiea-2012>

UCLA Center for World Languages: <http://www.international.ucla.edu/languages>

National Heritage Language Resource Center: <http://www.nhlrc.ucla.edu>

## Summary

jOSS (journal online submission system) is a custom-designed portal for managing all stages of the online academic publication process, from initial paper submission through publication. jOSS is currently in use by three UCLA units: 1) the *Heritage Language Journal*, 2) *African Arts Journal*, and 3) The Language Flagship Results 2012 meeting.

## Project Description

jOSS was created in 2010 to meet the needs of the *Heritage Language Journal* (HLJ), an online scholarly journal published by the UCLA Center for World Languages (CWL) and the National Heritage Language Resource Center (NHLRC). From 2003 – 2010, authors submitted papers to HLJ’s managing editor via email. Over the years, the manual submission process had become complicated to organize due to the large number of papers submitted in various stages of review and revision, as well as the number of issues in progress simultaneously. The old publishing process was inefficient (Exhibit A).

### Exhibit A: Limitations of Old Publishing Process

- Large volume of papers submitted to managing editor via email.
- Multiple issues in progress simultaneously, requiring management in six stages: new submission, internal review, external review, revision, editing, and publishing.
- Unable to track the latest updates and the change requests on the papers.
- Time-consuming process to provide feedback and notifying authors, editors, reviewers, admins, previewers of various stages.
- Difficult to collect statistical information on papers.
- Publishing a new journal issue required support from the information technology group.
- All papers submitted to a single email account.

The *Heritage Language Journal* editors wanted a system that gave personnel control over publishing, editing, and making corrections immediately. jOSS was designed according to the system development life cycle model from initiation to disposition. Requirements were gathered from consulting with the two journal editors and managing editor as well as Center for World Languages staff. Throughout its development, the editors, managing editor, and staff of the Center for World Languages and the International Institute’s staff tested the

system; in addition, the Center for World Languages hired testers familiar with publishing but not connected with the journal in order to provide an outside perspective. jOSS's user interface was designed to be intuitive and flexible. The new system was beta tested for several months before going into production. When it was released, old journal issues were migrated into the back end of this new system.

jOSS was released into production in time for a call for papers following the February, 2010 First Conference on Heritage and Community Languages held by NHLRC; the call imposed a deadline of October 2010. Thirty-eight submissions were uploaded to jOSS, a number that would have been impossible to handle without the help of an automated system. Exhibit B lists jOSS's main features.

#### Exhibit B: jOSS Application System Features

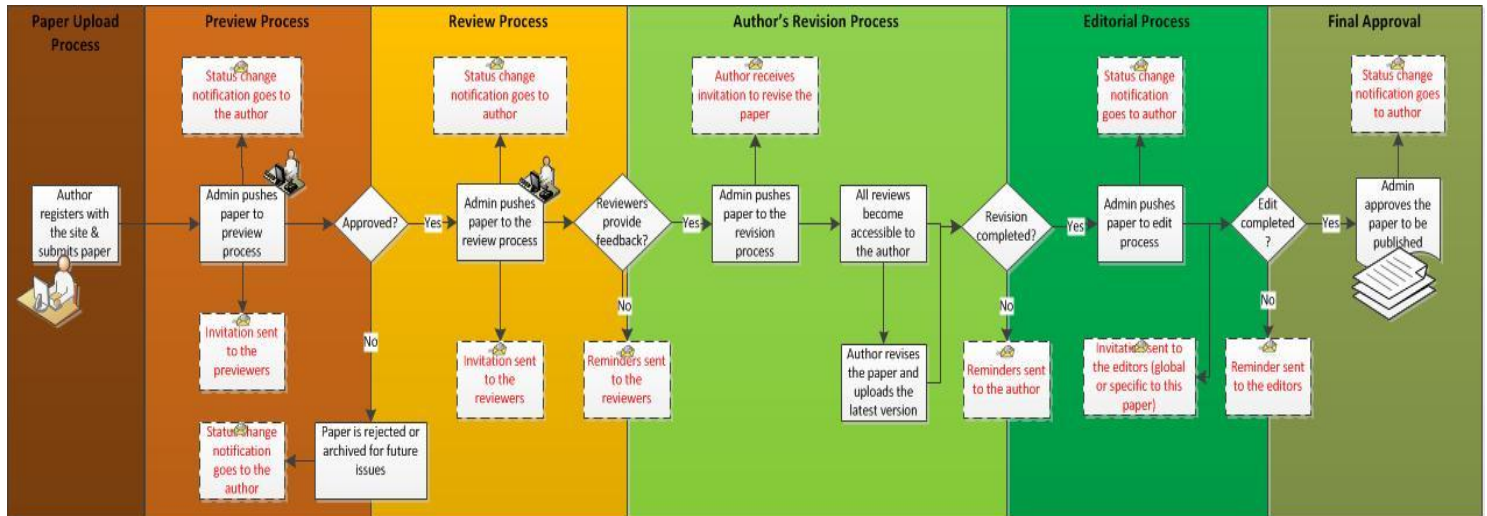
- User Administrative Rights Management
- Paper Details View Management
- Authors Upload Submission Process
- Preview Process
- Review Process
- Editorial Process
- Author's Revision Process
- Status Change Notices
- Custom Email Templates for Authors, Previewers, Reviewers, Editors, Admins
- Notes (Private/Public)
- Track papers in all stages for statistical purposes
- Collect data on readership and preferences on site
- Publish Papers Directly to Online Journal

#### Submission Process

The submission process includes six stages (Exhibit C). The first stage begins with an author **uploading** his/her paper online to jOSS to be considered for publication. After determining that the paper meets the journal's parameters with regard to theme, length, and a basis in research, the administrator moves the paper to the second stage, the **preview process**, where an assigned editor conducts internal review of the submission. The previewer determines whether the paper should be sent for external review or rejected. If the paper is considered worthy of review it will proceed to the next stage, the **review process**. In this process the editor assigned to the paper finds external reviewers who are experts in the areas covered in the paper to provide feedback and comments to the author. These comments are filed on jOSS. These comments are not available to the author until the editors make a decision about the paper; at that point, the editors file their own comments and the admin pushes the paper to the next stage, the **revision process**, where the author will be able to log into the jOSS system, review the comments submitted, and revise the paper. The paper then enters

the **editorial review process**, where the paper is revised as many times as necessary. The paper is then formatted and, in the **publishing** stage, the final version is uploaded in the **publishing** stage and can be selected for inclusion in the appropriate issue.

**Exhibit C: Submission Process**



**User Rights**

Users are given access to jOSS according to their role in the publication. There are five role assignments: (1) Uploader/Reviser (e.g., author), (2) Previewer, (3) Reviewer, (4) Editor, and (5) Admin. The User rights diagram (Exhibit D) shows an example of three papers with various access rights granted. These roles can be assigned globally or via individual papers (Exhibit E).

**Exhibit D: User Rights**

**LEGEND**

- Paper 1: user rights
- Paper 2: user rights
- Paper 3: user rights
- All Papers: Global Rights

		Paper 1				Paper 2				Paper 3			
		Upload	Preview	Review	Revision	Edit	Publish	Upload	Preview	Review	Revision	Edit	Publish
<b>Author</b>	Author 1	■											
	Author 2							■					
	Author 3												■
<b>Previewer</b>	Previewer Global		■										
	Previewer paper 1	■											
	Previewer Paper 2							■					
<b>Reviewer</b>	Reviewer Global			■									
	Reviewer paper 2							■					
	Reviewer Paper 3											■	
<b>Editor</b>	Editor Global					■							
	Editor 1				■								
	Editor 3												■
	Admin Global	■	■	■	■	■	■	■	■	■	■	■	■



## Exhibit E: User Roles for Papers

The screenshot displays the 'Update User Info' page for a user named Shirley Thomas. The page is titled 'Journal ONLINE SUBMISSION SYSTEM Admin' and includes a navigation bar with links for Home, Authors, Reviewers, Editors, and Admin. The user's profile information is shown on the left, including their email (SThomas@ucla.edu) and affiliation (HLU). A 'Global Role Assignments' section on the left lists roles: Admin (checked), Editor (checked), Reviewer (unchecked), and Previewer (unchecked). The main area shows 'This User's Roles on Individual Papers' with a table of roles for various papers. A green arrow points to the 'Global Role Assignments' section, and another green arrow points to the 'Roles for individual papers' table.

Title	A	E	R	P	U
Designing and implementing a Macro-approaches-based Curriculum for Heritage Language Learners by Ming-Hsuan Wu, Tzu Min Peter Chang	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Misplaced Heritage Language Learners of Japanese in Secondary Schools by Susan Oguro & Robyn Moloney	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Elevating "low" language for "high" stakes by Glenn Martinez and Adam Schwartz	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Recent Mexican Policy Initiatives in Support of Vulnerable Populations: La Prueba Maya, a Test for Bilingual Teachers of Indigenous Language-Speaking Students. by Liz Hollingworth, Graciela Cortés-Camarillo, and Pedro Sánchez-Escobedo	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ad hoc curriculum for Persian heritage learners: a study of four schools by Mojgan Mokhtatebi Ardakanic Robyn Moloney	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Multilingual Education in South Siberia: National Schools in the Republics of Altai and Tyva by Joan F. Chevalier	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Creating an Online Test for Heritage Learners of Russian by Julia Titus	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SPANISH HERITAGE LANGUAGE SOCIALIZATION PRACTICES OF A FAMILY OF MEXICAN ORIGIN by Rocío Delgado	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Creating a Space for Language Maintenance For Transnational HL Speakers: A Case Study by Erenst Ruslan Anip & Man-chiu Lin	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hindi Heritage Language Learners' Performance During OPTs: by Gabriela Ilk, Ilieva	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
College Chinese Heritage Language Learners' Implicit Knowledge of Compound Sentences by Lihua Zhang	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aspectual knowledge of high proficiency L2 and Heritage speakers of Russian by Anna Mikheylova	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The Mental Lexicon of Low-Proficiency Korean Heritage Learners by Mary Shin Kim	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Parents and Educators' Perceptions of Heritage Languages in Kansas: Facing the challenge of losing one's native language by Abdelilah Salim Seblaoui	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Heritage and Foreign Language Learner Use of the Spanish Subjunctive in Advice by Ariana M. Mikulski, Idoia Eliola	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Heritage Persian: Evidence from the Classroom by John Moore and Elham Sadegholvad	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Test Paper by Test Author	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Speaking Punjab(i)s: Heritage Language Socialization and Language Ideologies in a Sikh Education Program by Wendy Klein	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Adult Spanish Language Learners: A Comparison of Heritage Language Learners and Second Language Learners by Janet S. Oh & Bertha A. Nash	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Paper Details View

The "paper details" view displays information depending on a user's assigned role (Exhibit F). For example, a permanent editor can see all information about all papers, but a guest editor can only see information about the papers submitted for that editor's issue. Authors can initially see only what they have submitted; when the editors make decisions about the submission (e.g., to send a paper out for external review, to reject or to require revisions or a resubmission), the editors make available the external reviews and the editors' comments. At the same time, other aspects of submissions, such as internal correspondence among editors, is never visible to the authors. All documents, notes, and email messages are archived with a time stamp in the database system.

An especially useful feature that developed during jOSS's beta stage allows overwriting of an older version of a paper. The editors realized that this was necessary when many submissions included data that identified the

author in the “Properties” section of the document. Asking each author to resubmit anonymized papers would have been enormously labor-intensive; moreover, it has become clear that many authors do not know how to remove these data. The “replace file” feature allows substituting a file with a version that is free of identifying data. Allowing only admins to complete this step ensures that authors cannot submit revised papers before they are reviewed.

**Exhibit F: Paper Details View**

The screenshot displays the 'Paper Details' page in the Journal ONLINE SUBMISSION SYSTEM Admin interface. The page includes a navigation menu (Home, Authors, Reviewers, Editors, Admin) and a user greeting (Hello admin\_g). The main content is divided into three primary sections:

- Paper Details:** Shows the title 'Exploring Use of Technology in Heritage Language Education', author 'Lavinia Boykin', and current status 'Awaiting reviewer'. It includes a 'List Papers' button and a 'Date Uploaded' of 4/27/2012 1:58 PM.
- All Files Related to this Paper:** Lists files uploaded by Lavinia on 4/27/2012 1:58:06 PM, including the paper file and author's bio, with links to open or replace files.
- Users with Rights:** A table listing users with various roles (Admin, Editor, Reviewer, Author) and their email addresses.

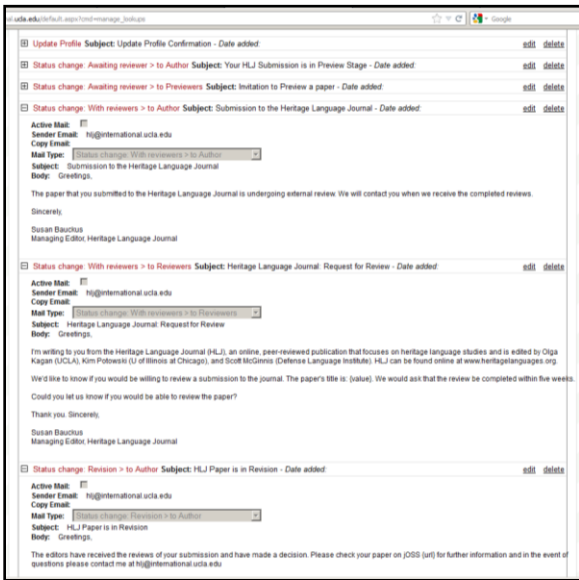
Callouts provide additional context:

- 'Paper's latest status; paper details are editable' points to the 'Awaiting reviewer' status and the 'Edit' link.
- 'All files related to paper: original submitted paper, previews, reviews, edits and final version' points to the file list.
- 'Form changes for each stage in process' points to the 'Preview of Paper' section, which includes fields for reviewer comments and a 'Submit Preview' button.
- 'Users with different roles on this paper' points to the 'Users with Rights' table.

**Embedded Email Correspondence**

Auto-correspondence email templates have been incorporated (Exhibit G). The auto-generated emails are customizable and can be sent during all paper status changes between authors, previewers, reviewers, and/or editors where applicable.

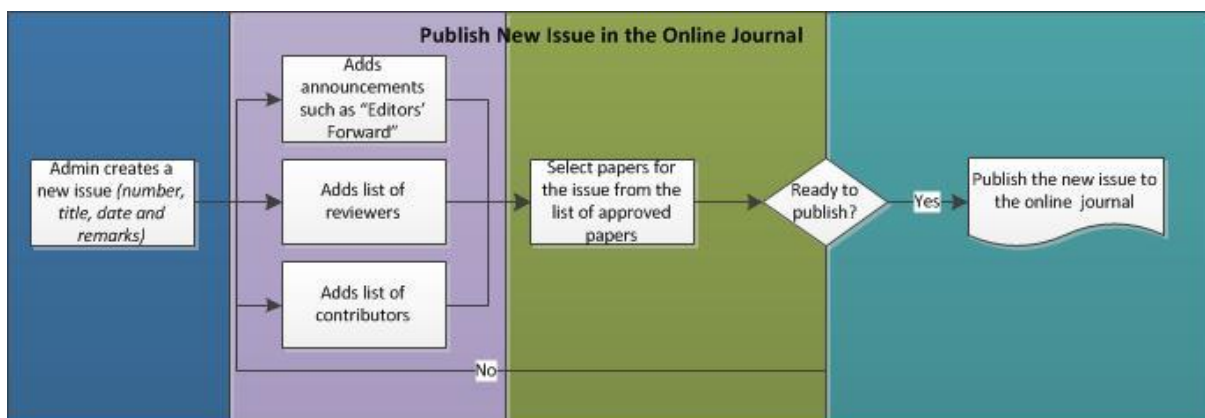
### Exhibit G: Customizable Email Templates in jOSS



### Publish New Issue in the Online Journal Process

jOSS is connected to the “back end” of the journal’s website, making online publishing seamless. Exhibit H shows the steps involved in publishing a new journal issue using jOSS. In addition, contributors and their biographies are added and reviewers’ names can appear as well. Exhibit I shows the home page of the journal, which displays the latest published issue’s table of contents; other issues are available through a drop-down menu located on the green bar across the page. Papers are selected from jOSS and placed in the order called for, and then the issue is published to the online journal.

### Exhibit H: Publish New Issue in the Online Journal





## Exhibit I: New Spring 2012 Issue Published to Heritage Language Journal using jOSS



## Financial Impact

By reducing the amount of time and resources required to manually review and publish papers for three units, UCLA International Institute's savings estimate is \$121,500 annually.

The savings calculation is based on:

150 (author submissions per year for all units) \* 6 (steps in approval process) \* 3 (hours saved per application per step by reducing manual sending of papers for review for all units) \* \$45 (cumulative average hourly rate for administrators/ department heads).

## Key Areas of Benefits

### Innovation

jOSS offers several dimensions of innovation:

- 1) The tools available to users before jOSS allowed for managing published content only; however, most of the work of publishing is done before an article is published. jOSS allows us to keep a record of all

stages of the process from submission onward and accommodates the collaborative nature of peer-reviewed publishing.

- 2) The system gives users full control over publishing on line, allowing them to make corrections after publication when necessary. This feature, implemented by the International Institute's Information Technology group, is not available in the online academic publishing mechanism available to the University of California.
- 3) In the past, publishing required assistance from the Information Technology group. Given the many demands on that group, the journal needed a way to publish independently. The publishing mechanism is simple; once all the papers and authors' biographies have been uploaded in the publishing state, an admin with permission need only check a box and then update the volume, after which it appears online.
- 4) jOSS has components that can be customized for use in other publications, allowing users to participate in designing the portal to suit their business requirements. Two examples where jOSS has been integrated and customized, *the UCLA Flagship Results 2012* (Exhibit J) and *African Arts Journal* (Exhibit K).

#### Exhibit J: UCLA Flagship Results 2012 integrated into jOSS

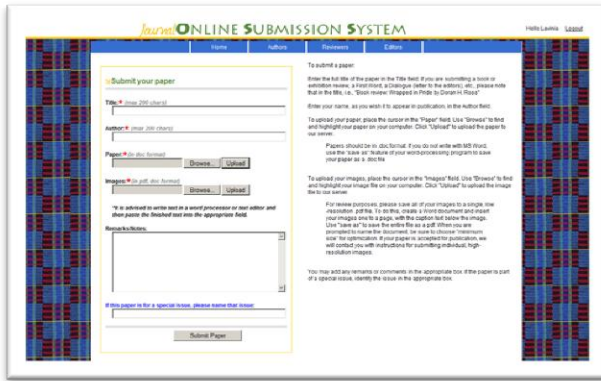


The screenshot displays a web-based submission form titled "Submit your paper" for "RESULTS 2012". The form includes the following fields and controls:

- Title:** A text input field with a red asterisk and the label "Enter 200 character".
- Author:** A text input field with a red asterisk and the label "Enter 200 character".
- Paper:** A section with a red asterisk and the label "Do not forward". It contains a "Browse" button and an "Upload" button.
- Author's Bio:** A section with a red asterisk and the label "Do not post, do forward". It contains a "Browse" button and an "Upload" button.
- Remarks/Notes:** A large text area for additional information.
- Special Issue:** A text input field with a blue asterisk and the label "If this paper is for a special issue, please name that issue".
- Submit Paper:** A button at the bottom of the form.

The page header features the logo for "THE LANGUAGE FLAGSHIP" and the text "RESULTS 2012" with a green checkmark icon. A navigation menu includes "Home", "Submit", "Feedback", and "Admin".

Exhibit K: African Arts Journal integrated into jOSS

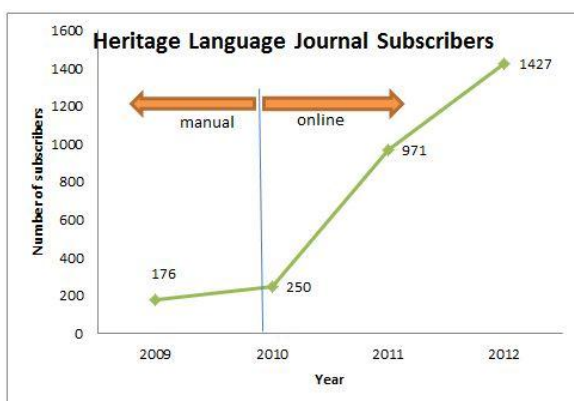


Improvement of Operational Efficiency

Since using jOSS, the *Heritage Language Journal* (HLJ) has become more effective in managing and streamlining the publication process. HLJ’s publication rate has increased 150% since the release of jOSS from one issue<sup>1</sup> per year to two or three per year. As the journal has become better known and has published more often, it has received an increased number of submissions, and having a central location for all materials that jOSS provides has become increasingly essential. The system improves communication among journal authors, editors, and reviewers by tracking changes to papers and providing timely responses to requests by authors, previewers, reviewers, and editors.

jOSS also has improved the information available to the journal and its funders about readership. In the past we had a voluntary subscription to the journal. Our subscriber list never exceeded 250 users and we were confident that the journal had many more readers. Since launching jOSS, we have instituted a mandatory but free subscription, requiring readers to log in to read the journal. Our database statistics now shows a total of 1427 subscribers, and our numbers continue to grow with the publication of each additional issue (Exhibit L).

Exhibit L: Heritage Language Journal Subscribers



## Collaboration

jOSS was developed through collaboration between the UCLA International Institute's Information Technology group, the Center for World Languages, and the National Heritage Language Resource Center. jOSS has successfully been customized twice to meet the need of *African Arts Journal*, UCLA publication, and a non-UCLA scholarly symposium held by The Language Flagship. These uses show jOSS's versatility; the *African Arts Journal* and *Heritage Language Journal* are academic publications, but the Flagship Results 2012 is a symposium and jOSS was used in this instance as a content management system for abstracts. Flagship Results 2012 hopes to publish a proceeding volume of papers based on conference presentations, and at that point we will be able to use jOSS as a publishing vehicle.

## Timeline

It took ten months to initiate, develop a system concept, determine requirements, design, develop application system, integrate and test jOSS. The system is in production and currently used by three UCLA units.

## Technology Used

### On the client side:

JavaScript and jQuery (cross-browser JavaScript Library) are used to improve end user's interactions with the application. Cascading Style Sheets (CSS) has been used to customize the user interface and the navigation. Adobe Illustrator and Photoshop have been used to develop visual elements for the user interface.

### On the server side:

.NET framework 3.5 has been used to take advantage of the current technology and scripting libraries offered by Microsoft.

### On the backend:

Application is hosted on the Microsoft 2008 Server with IIS 7 web server. For the database, Microsoft's SQL Server 2008 has been utilized.

### Quality Assurance:

The application has been tested thoroughly for browser compatibility on different operating systems such as Windows, Mac OS, and IOS and browsers such as Internet Explorer, Chrome, Firefox and Safari to ensure a pleasant user experience.

## Customer Feedback

Customer feedback has been compiled from editors of the *Heritage Language Flagship Journal*, *African Arts Journal*, and Language Flagship Results 2012.

### Heritage Language Journal Feedback

“jOSS has greatly simplified record keeping. We have been able to keep notes on each paper’s submission page, visible only to us, which help us keep track of a paper’s status. The ability to overwrite a paper after removing an author’s identifying data, and then note that in the “notes” feature, has helped us tremendously. We have made a commitment to publish at least twice a year, and last year we managed to publish three times; this rate of publication would not be possible without jOSS’s ability to allow all users access to papers according to their roles. The back end of jOSS also allows us to generate a database of users, giving us a much more accurate sense of our readership.”

### African Arts Journal Feedback

“As the executive editor of African Arts, in charge of managing the peer review process as well as producing the print journal, I find my job has been immensely simplified by jOSS. Just for starters, having all the information about submissions in a single site accessible from any computer has cut down on material falling through the cracks, and automated responses are a big time-saver.

I particularly like the fact that I can write and modify not only the auto-response emails but also the text on the site, so that as I receive questions from users I can update the instructions myself. Most of our authors and reviewers have found the system easy to use, but we have a substantial number who are simply technophobes and the system is flexible enough that we can create workarounds that enable us to accommodate them. Our editors are also very impressed by the technology group’s quick and helpful responses when problems do arise.”

### Language Flagship Results 2012 Feedback

“Without jOSS, it would have been very difficult to organize the submission and review of abstracts of papers’ for Results 2012. jOSS allowed for the collection, review, and communication to those who submitted abstracts of papers for results 2012 to be streamlined and efficient and enabled the results 2012 review committee, which comprised of multiple reviewers all over the country to work together to review and select presenters for Results 2012 remotely. Without jOSS the review process and communication to reviewers would have been much more labor intense and inefficient. We are also planning on using jOSS to compile and review finalized papers for Results 2012 and have no doubt that the jOSS will simplify the management of this process.”

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<sup>1</sup> HLJ published more than one issue per year only in one year (2008) before jOSS. In 2011, the first year we published using jOSS, HLJ published three issues; one issue has been published in 2012 and two more are anticipated.