Let's Get Technical-One Library's Collaborative Approach to Simplifying the Ordering Process with Spreadsheets

Stacey Marien  
*American University Library, smarien@american.edu*

Alayne Mundt  
*American University Library, mundt@american.edu*

Susan J. Martin  
*University of Chicago Library, smartin28@uchicago.edu*

Christie Thomas  
*University of Chicago Library, clthomas@uchicago.edu*

Follow this and additional works at: [https://docs.lib.purdue.edu/atg](https://docs.lib.purdue.edu/atg)  
Part of the [Library and Information Science Commons](https://docs.lib.purdue.edu/atg)

**Recommended Citation**  
Marien, Stacey; Mundt, Alayne; Martin, Susan J.; and Thomas, Christie () "Let's Get Technical-One Library's Collaborative Approach to Simplifying the Ordering Process with Spreadsheets," *Against the Grain*: Vol. 29: Iss. 5, Article 32.  
DOI: [https://doi.org/10.7771/2380-176X.7860](https://doi.org/10.7771/2380-176X.7860)
comes across peer 4-year colleges and also better than results across all SAILS-testing institutions. For Standard 1 (2011-2015), “Determines nature and extent of information needed,” our students showed a 14% scoring improvement, as compared with a 1% improvement for their counterparts across all 4-year colleges using SAILS, and a 1% scoring improvement when all university results were included.

For Standard 2 (2011-2015), “Access needed information effectively and efficiently,” our students showed a 12% scoring improvement, as compared with a 2% improvement for their counterparts across all 4-year colleges using SAILS, and a 1% scoring improvement when all university results were included.

For Standards 3/4 (2011-2015), “Evaluates information and its sources critically, and incorporates selected information into his/her knowledge base,” our students showed a 9% scoring improvement, as compared with a -2% decline for their counterparts across all 4-year colleges using SAILS, and a -3% scoring decline when all university results were included.

For Standards 5/6 (2011-2015), “Understands social, legal, and economic issues surrounding use of information, etc” our students showed a 9% scoring improvement, as compared with a 6% improvement for their counterparts across all 4-year colleges using SAILS, and a 2% scoring improvement when all university results were included.

Implications & Questions

These independently verifiable results raise one obvious question: can any single factor in our QEP be identified as being primarily responsible for our freshmen-to-senior SAILS test scores showing steeper improvements than corresponding freshmen-to-senior SAILS test scores from peer colleges and from all institutions?

The single factor that most sharply differentiated our Information Literacy QEP from all others we studied in the 2008-2010 proposal formulation period was our dual focus on IL instruction AND the simultaneous implementation of our Learning Commons. It is, therefore, very tempting to say that this dual focus was responsible for our SAILS testing scores showing superior results to colleges and universities whose IL QEP’s placed sole focus on IL instructional activities.

There is, however, one serious gap in our knowledge about institutions using SAILS: we have no data about which college and university libraries employing the SAILS test during that time period did or did not have spaces identifiable as Information Commons (IC) or Learning Commons (LC). It is an open question whether a retrospective study of colleges and universities using SAILS from 2009-10 to 2014-15 could uncover data about the presence or absence of IC / LC spaces. It seems especially unlikely that such a study would find enough institutions whose IC / LC implementations corresponded exactly with the start of an IL QEP to make meaningful comparisons.

It therefore seems unlikely that any future research can reliably replicate the outcomes demonstrated by the IL QEP at Belmont Abbey College for the simple reason that the ACRL IL Competency Standards of 2000 have now, of course, been replaced by the “Framework.” But it is clear that IC / LC implementation has continued in numerous college and university libraries since 2015, and new testing protocols designed around the “Framework” (including one from Project SAILS) are now available. It will be a matter of significant interest to see whether future statistical correlations appear between implementation of IC / LC facilities and IL test freshmen-to-senior scoring improvements.

Let’s Get Technical — One Library’s Collaborative Approach to Simplifying the Ordering Process with Spreadsheets

by Susan J. Martin (Head, Acquisitions Services, University of Chicago Library) <smartin28@uchicago.edu>

and Christie Thomas (Head, Data Management Services, University of Chicago Library) <clthomas@uchicago.edu>

Column Editors: Stacey Marien (Acquisitions Librarian, American University Library) <smarien@american.edu>

and Alayne Mundt (Resource Description Librarian, American University Library) <mundt@american.edu>

The Problem

The OLE implementation required adapting a high-volume acquisitions workflow to the new acquisitions module. The department was able to cope with the new labor-intensive workflow by developing batch loading processes for many major European and Latin American vendors. In August 2016, the department also had to grapple with the ordering volume that accompanies a new fiscal year with fewer and newer staff due to staff changes and vacancies in Acquisitions. At the time, ordering priority was assigned to materials in Western European languages, the majority of which were directly placed in vendor’s web-based ordering systems. For these materials, the order information is received in MARC format with order data embedded in 9xx fields. Data Management batch creates the bibliographic record and order using established workflows. This process is fast and efficient, providing access to the bibliographic and order data in OLE within 24 hours of receipt from the vendor.

The Situation

The University of Chicago Library serves a diverse university community of faculty, staff, students, and researchers with over 11.3 million volumes, 62,300 linear feet of archives and manuscripts, and 153 terabytes of digital materials. In August of 2014, the Library implemented an open source library system, OLE. As with any new system implementation, there were many challenges as Technical Services staff adjusted to the system and developed new workflows. Two Technical Services units, Acquisitions Services and Data Management Services, collaborated to address the challenge of ordering backlogs.

continued on page 79
Come see us at table # 129 at the Charleston Vendor Showcase

For more information on how to support or participate in the archive contact us at info@clockss.org.

CLOCKSS Archive is a dark archive that ensures the long-term survival of web-based scholarly publications, governed by and for its stakeholders.

The archive includes over

- 230 publishers
- 20,000 journals
- 20,000,000 articles and
- 59,000 ebooks.

53 journals have been triggered as open access.

www.clockss.org

However, for orders from vendors who cannot provide MARC records with embedded order data, our experience was drastically different. These orders had to be created manually. The ordering assistants searched OCLC to locate a bibliographic record, imported the record into OLE, and then created the purchase order. This workflow took considerably longer to accomplish not just due to OLE’s multi-step order process, but also because of difficulties working with some of the materials, specifically those from the Middle East and Eastern Europe.

By September 2016, the ordering unit faced a backlog of 1170 individual title requests in Arabic, Persian, and Turkish. These orders needed to be placed immediately to ensure receipt during the current fiscal year, and to allow the selector to view accurate fund balances. However, placing these orders would take significant time — every 100 orders equaled 33 hours of acquisitions staff time. It would take eleven weeks to order just this backlog.

There had to be a better way.

The Information

With the goals of eliminating the backlog, leveraging economies of scale, and creating a more efficient process for future ordering, the Head of Data Management Services approached the Head of Acquisitions Services and volunteered her unit’s services for developing a batch order process for these materials. Prior discussions with a colleague had revealed that it was possible to create MARC records from spreadsheets and we were able to build upon the process outlined by Mikyung Kang in the Handbook for Korean Studies Librarianship Outside of Korea when developing our workflow for creating MARC records with embedded order data from spreadsheets.1

We reviewed the current process and available information. Orders were already emailed to the acquisitions department as Excel spread-sheets from the Middle East selector’s student assistants. These orders were stored on a shared computer drive so the ordering assistants could easily access them. These spreadsheets had almost complete bibliographic and order information: title, author, publisher, ISBNs, OCLC numbers (if available), prices, fund codes, donor plates, and vendor catalog numbers. Data Management needed some additional information to create a brief MARC bibliographic record and order record, for example: language, vendor ID, building code, room number. The information also need to be provided in a consistent format.

The Players

- Head, Acquisitions Services
- Head, Data Management Services
- Bibliographer for Middle Eastern Studies
- Middle Eastern Studies student assistants
- Supervisor, Monographic Ordering
- Data Management Assistant

The Process

We opted to use Google Drive for storage and access to the shared order sheets. Google’s Sheets have the flexibility of Excel with the added benefits of tracking document versions and allowing simultaneous access to multiple staff members, features that the Library’s shared drive space did not have.

We set up order templates with set fields. When possible, these fields had data validation rules applied in the forms of format criteria and drop-down menus. A few constant data fields (vendor id, building and room codes) were protected from editing. We wrote detailed step-by-step instructions for both selector and acquisitions staff. These instructions contained a field by field glossary outlining the source of the data and how it should be entered. Selector and acquisitions staff received training on the specific data entry requirements and the changes in workflow and procedures.

continued on page 80
The spreadsheets included:

- Title (Transliterated)
- Author (Transliterated)
- Place of publication (Transliterated)
- Publisher (Transliterated)
- Publication year (Validated to accept only one date. Either the Gregorian or the Hijri date, but not both)
- Volume (This must remain 1)
- Cost
- List price (Cost + estimated shipping costs)
- OCLC number (If available)
- ISBN (Only one and without hyphens)
- Language (Drop down menu with LC language codes)
- Fund code (Drop down menu with select fund codes)
- Donor plate (Drop down menu with selector donor codes)
- Vendor catalog number
- OLE vendor ID number
- Building code (For delivery address)
- Room number (For delivery address)
- Notes (For special locations, edition information, special processing instructions, etc.)

1. Order selections are entered into the order spreadsheet by the selector’s student assistants.
2. When the order is ready to place, the student assistant emails acquisitions with the name of the file to be ordered. Acquisitions acknowledges the receipt of the order and provides an estimated time frame for getting the orders verified and placed typically within five business days.
3. The Monographic Ordering Supervisor verifies the order, removes and forwards any selections requiring manual entry, such as standing orders or serials. The Supervisor also removes any added volume orders and orders written in Western European languages. These are assigned to Acquisitions Assistants for treatment.
4. The Monographic Ordering Supervisor verifies and corrects the remaining order information for any data entry mistakes and then notifies Data Management that the order sheet is ready.
5. Data Management integrates the order load request into their routine batch processing workflows.
6. The Data Management Assistant exports the Google Sheet as an Excel spreadsheet and validates the data.
7. After any corrections are made, the Data Management Assistant uses the MarcEdit Delimited Text Translator to generate a file of MARC records with the bibliographic and order data from the spreadsheet. Many templates have been generated for mapping bibliographic and order data for different situations, for example when bibliographic and order data is available versus when only order data is available.
8. The Data Management Assistant then imports the file of MARC records with order data and informs Acquisitions when the records are available in OLE.
9. The loaded orders go through the department’s regular daily duplication check. This is a batch process run by Data Management Services which identifies duplicate orders in a daily report. Acquisitions staff check the report and verify if any of the flagged orders are duplicates. Any duplicate orders are canceled with the vendor and voided. This process eliminates the need for pre-order searching.
10. The remaining orders are extracted via a report app and emailed out to the vendors each Monday.

**The Results**

The results were dramatic and immediate. The backlog was eliminated, and the department can keep current with new order requests. Every 100 orders now require 2 hours of work by Acquisitions staff—a staff time savings of approximately 93%. Each spreadsheet of data, regardless of how many orders are included, takes Data Management staff approximately 30 minutes to process. This average does not include the time it takes for OLE to process the files, which is largely unmonitored.

We are also seeing a reduction in the overall time between selection and receipt of the materials. We plan to take a more in-depth look at the selection-order-receipt time frames to analyze and quantify any improvement in that area. We hope to see an improvement in our fill rates for materials from that region of the world due to the faster ordering process, and preliminary analysis indicates a 17% increase in the fill rate of our Arabic language materials over a 10 month period. A parallel process is used for some Slavic materials which has enabled acquisitions to eliminate its order backlog for those items and has cut staff time in that specific workflow by 90%. We would like to more fully investigate the fill rates from all the various vendors and over a longer period of time.

This process has evolved to include non-romanized scripts in 880 fields of the (increasingly less) brief bibliographic records for Arabic, Persian, and Korean language materials. We have also generated templates that allow for the batch processing and ingest of bibliographic and order data for additional vendors and materials.

---

**Endnotes**


---

We just finished reviewing the Fast Pitch essays this afternoon. We are looking forward to the session on Wednesday afternoon at the Gaillard Center at 4:40-5:40. There were some great and interesting ideas. Melanie Dolchek (SSP) has agreed to coach the Fast Pitch contestants for their presentations at the Conference. The judges — Kent Anderson, Jim O’Donnell, and Martha Whittaker will meet and agree on a winner among themselves — and then those of us in the audience will have a chance to vote on our winner. Be sure to come and vote for your favorite at the Conference — remember Wed 11/8 at 4:40 PM.

Steve Goodall and I agree: we need an “innovations” editor for ATG!! We could brainstorm new possible ideas that might turn into Fast Pitch presentations! What do y’all think? Send nominations or suggestions — <kstrauch@comcast.net>.

continued on page 83