Customized Mapping and Metadata Transfer from DSpace/SOAR to OCLC to Improve ETD Work Flow

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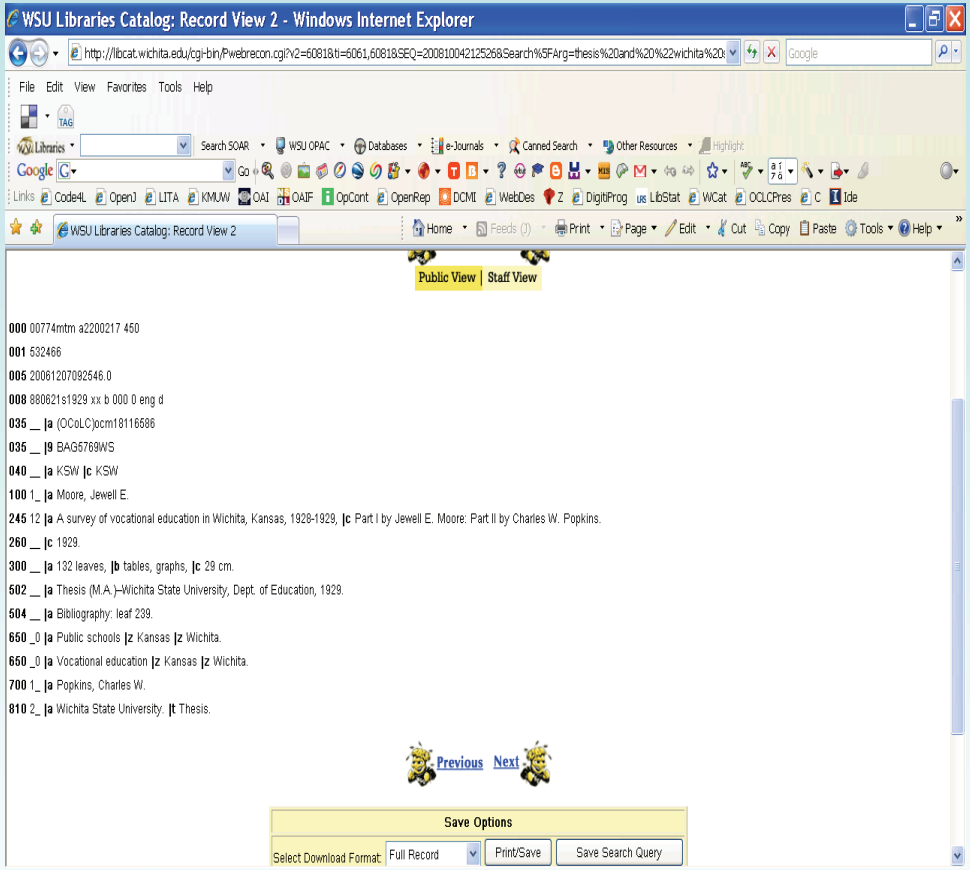
Outlines

- Thesis Cataloging Workflow Dynamics: overview of changes
- Cataloging ETDs in SOAR and OCLC/Voyager: records & workflow
- Improving ETD Workflow through metadata harvesting, customized mapping and metadata transfer

Workflow for Paper Theses

- 1929-2002 – over 80% records (~ 5000)
- 70 year range: stable record's structure
- Workflow: (1) original cataloging (2) item's marking/ labeling
- Cataloging efficiency: constant data
- Labor intensive: SH



Thesis MARC Record (till 2002)

_000 01093nam a2200277 i 450 001 331612 005 19991028065706.0 008 780705s1977 ksu 000 0 eng d

035 __ **|a** (OCoLC)ocm04023056

035 __ **|9** ABK7544WS

040 __ **|a** KSW **|c** KSW

099 __ **|a** LD**|a** 2667 **|a** .T4 **|a** V871d

100 1_ **|a** Vliet, Martha Tasheff.

245 12 **|a** A descriptive study of obstetric patients' knowledge of and self reported attitudes toward the prenatal experience / **|c** by Martha Tasheff Vliet.

246 3_ **|a** Patients' perceptions of prenatal experience

260 __ **|a** Wichita, Kan. : **|b** WSU, **|c** 1977.

300 _ **|a** viii, 75 leaves ; **|c** 29 cm.

490 1_ **|a** Wichita State University. Theses

500 __ **|a** Also in University Archives: THESIS.

500 __ **|a** Title on spine: Patients' perceptions of prenatal experience.

502 __ **|a** Thesis (M. Ed.) - Wichita State University, December 1977. Department of Instructional Services.

504 __ **|a** Bibliography: leaves 48-52.

650 _0 **|a** Pregnancy.

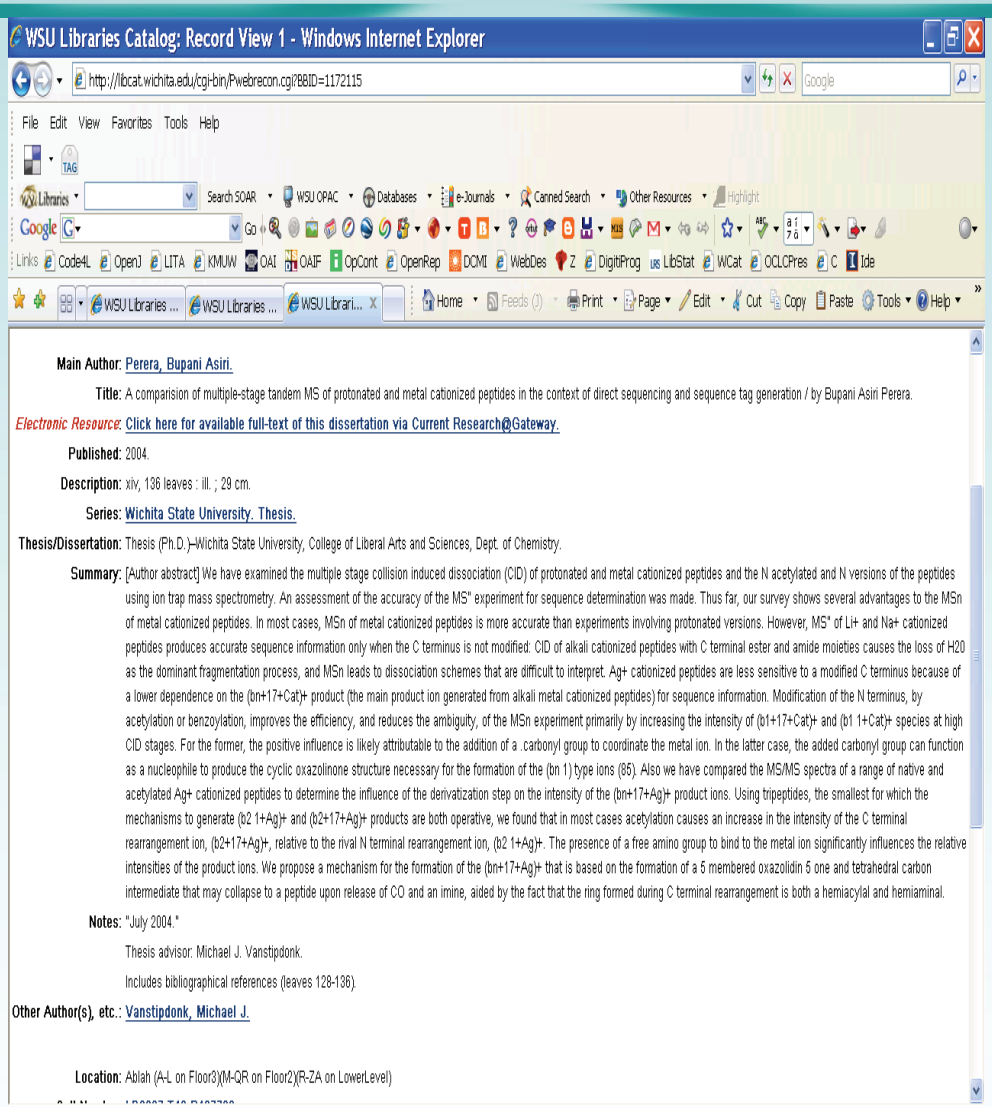
650 _0 **|a** Pregnancy **|x** Psychological aspects.

650 _0 **|a** Prenatal care.

810 2_ **|a** Wichita State University. **|t** Thesis.

Theses Digitization, Workflow & Records

- 2003-2004 digitization of WSU Theses began
- UMI/ProQuest effects workflow
- Linking Voyager records to UMI/ProQuest



OCLC/Voyager- UMI/ProQuest

- Record enhancements (fields /contents)
- 856 -links from a catalog to full text in UMI
- 520 – author abstracts
- 500 & 700 -- advisor's name
- Workflow changes: Special projects: a repetitive data entry goes to students
- Cataloger creates procedure; MACRO for speedy processing; trains students, and review their work

Thesis Bib Record 2004 (MARC)

000 03794ctm a2200289la 45 001 1172115 005 20070208132604.0 008 050201s2004 xx a bm 000 0 eng d

035 __ **|a** (OCoLC)ocm57545066

035 __ **|a** 1172115 040 __ **|a** KSW **|c** KSW

049 __ **|a** KSWA

050 _4 **|a** LD2667.T42 **|b** P437733

099 _9 |a Microfilm 1391

100 1_ **|a** Perera, Bupani Asiri.

245 12 **|a** A comparision of multiple-stage tandem MS of protonated and metal cationized peptides in the context of direct sequencing and sequence tag generation / **|c** by Bupani Asiri Perera.

260 __ **|c** 2004.

300 __ **|a** xiv, 136 leaves : **|b** ill. ; **|c** 29 cm.

502 __ **|a** Thesis (Ph.D.)--Wichita State University, College of Liberal Arts and Sciences, Dept. of Chemistry.

500 __ **|a** "July 2004."

500 __ |a Thesis advisor: Michael J. Vanstipdonk.

504 __ **|a** Includes bibliographical references (leaves 128-136).

520 8_ |a [Author abstract] We have examined the multiple stage collision we bind to the metal ion significantly

700 12 |a Vanstipdonk, Michael J.|e advisor

810 2_ **|a** Wichita State University. **|t** Thesis.

856 40 |u http://proxy.wichita.edu:2048/login?url=http://wwwlib.umi.com/cr/wichita/fullcit?p3137654 |z Click here for available full-text of this dissertation via Current Research@Gateway.

994 __ **|a** C0 **|b** KSW

Transitional Period: 2004-2006

- e-Theses in four places: OCLC/Voyager; ProQuest; a temporary web site and SOAR
- Paper theses are still submitted
- Development of a new workflow for ETDs
- e-docs, paper docs, inventory table
- Naming convention, ETD file preparation
- MARC and DC manual input; further changes in records (identifiers)

00003279ctm a2200433Ia 450
0011245843
00520080422003723.0
006m d
007cr m|||||||||
008070423s2005 xx a sbm 000 0
020__ |a **9780542757921**
020__ |a **0542757923**
0247_ |a **AAT 1436580 |2 UMI**
0248_ |a **778 SOAR**
035__ |a (OCoLC)ocn**123426976**
035__ |a 1245843
040__ |a KSW |c KSW
049__ |a KSWA
099_9 |a Microfilm 1502
099__ |**a t05040**
1001_ |a Radhakrishnan, Preetha.
24510 |a Enhanced routing protocol for graceful degradation in wireless sensor networks during attacks |h [electronic resource] / |c by Preetha Radhakrishnan.
260__ |c 2005.
300__ |a xii, 50 leaves : |b ill., digital, PDF file.
500__ |a "December 2005."
504 __ |a Includes bibliographic references (leaves 48-50).
500 __ |a Title from PDF title page (viewed on April 23, 2007).
533__ |a Electronic reproduction. |b Ann Arbor, MI : |c ProQuest Information and Learning Company, |d c2006.
538__ |a System requirements: Adobe Acrobat Reader.
538__ |a Mode of access: World Wide Web.
502__ |a Thesis (M.S.)--Wichita State University, College of Engineering, Dept. of Electrical and Computer Engineering.
500__ |a Thesis adviser: Ravi Pendse.
500__ |a UMI Number: AAT 1436580
5203_ |a [Author's abstract] With the deployment of Sensor networks gaining some …
655_0 |a Electronic dissertations.
70012 |a Pendse, Ravindra.|e advisor
85640 |u http://proxy.wichita.edu:2048/login?url=http://wwwlib.umi.com/cr/wichita/fullcit?p**1436580** |z Click here for available full-text of this thesis via Current Research@Gateway.
85640 |u http://soar.wichita.edu/dspace/handle/10057/**778** |z A link to full text of this thesis in SOAR

New additions to ETD record: identifiers of several databases that have this thesis

Record consists of 30 fields

ETD Program 2006-2008

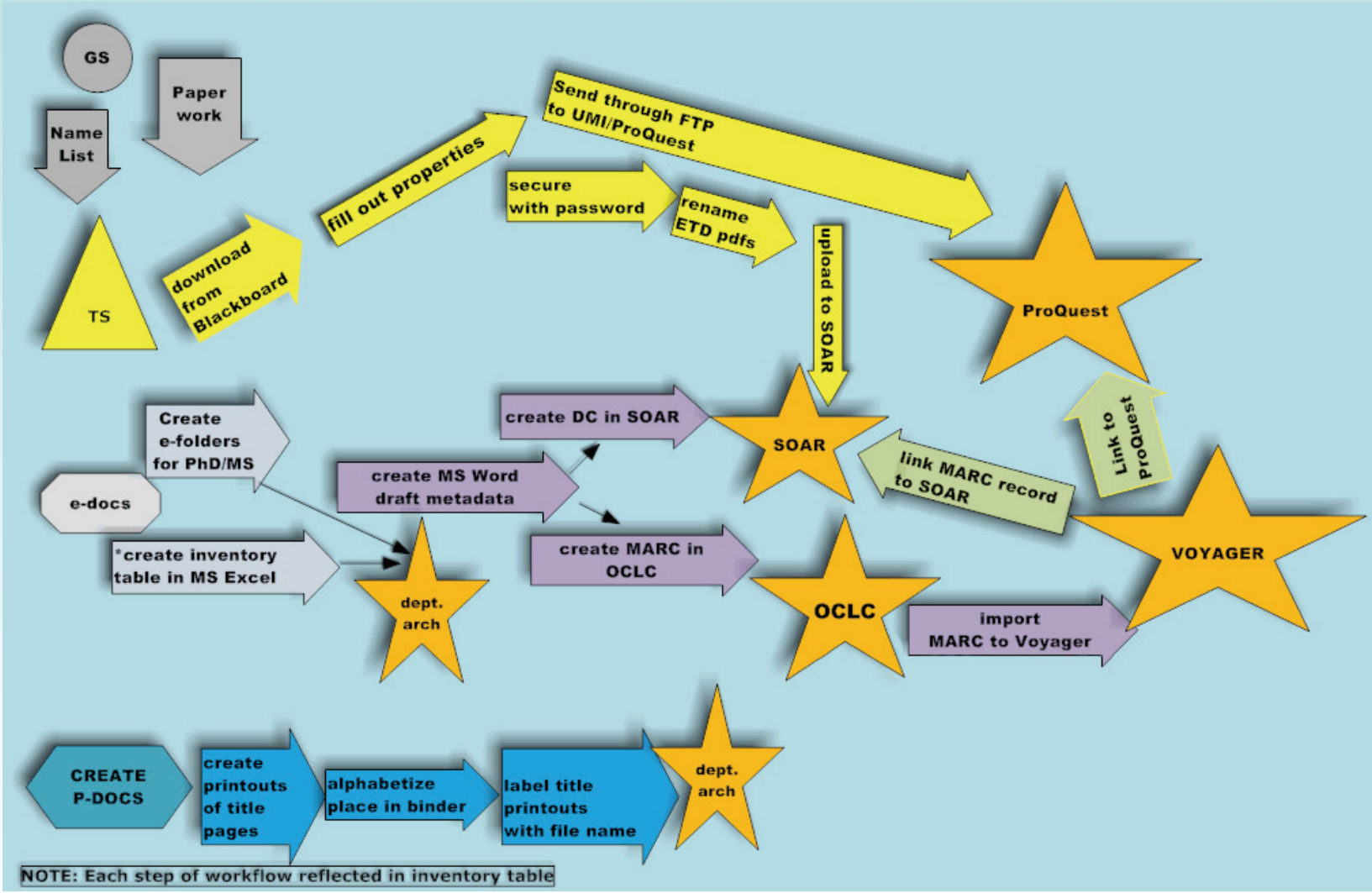
- From 2006, WSU have a full scale ETD program (400 records, 2005-2007)
- eTheses (no paper); no ProQuest or a temporary access to ETD via a web site
- eTheses are in three databases: SOAR and OCLC/Voyager
- Work Flow includes the number of operations with a digital file (thesis) and metadata records (MARC and DC)

Inventory Table

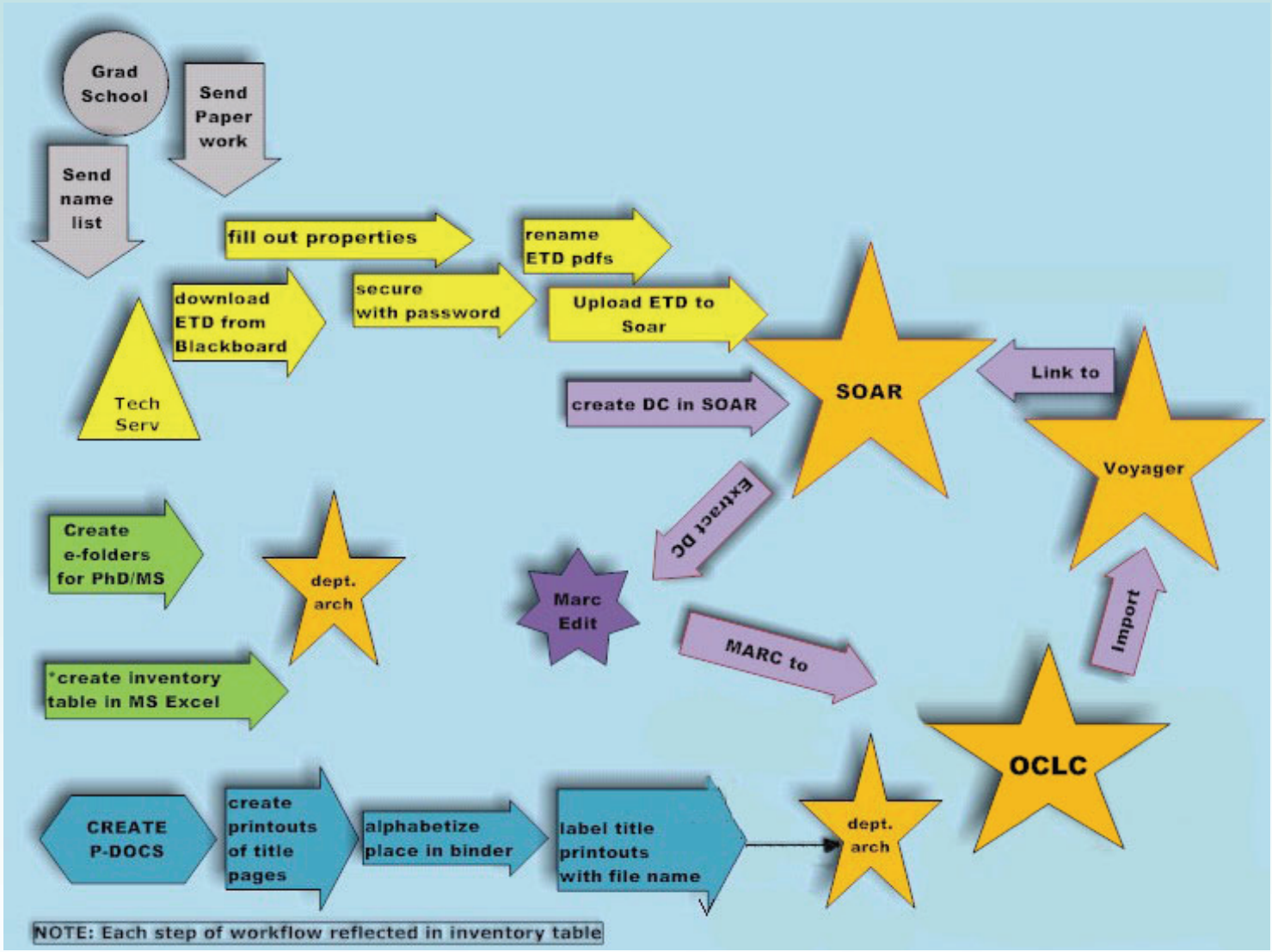
Pdf ID	No	Last First Name	Year	Mon.	GS send list	PDF Harvested	PDF Property filled	PDF Subm To UMI	PDF secured
d07001	1	Smith John	2007	May	date	date	date	date	date

PDF re-named	GS Paper work received	Soar ID	Voyager Bib	UMI ID	UMI Link	Soar Link	Micr film No	Link Checked	Note
date	date	1074	1262388	3240865	Yes/no	Yes/no	2740	date	

ETD Workflow: Manual Input DC & MARC



The Improved Workflow: no draft record and manual MARC input



A Wider Context of ETD Workflow

- ETD workflow in different institutions
  - University of Virginia (1999), Texas A & M (2004)
    - Home-grown scripts, site-specific harvesters
  - Kent State University (2007)
    - Harvest from OhioLINK ETD Center, ETD-MS to Marc…
- XSLT Transformation
  - LC MARC 21 XML schema with MarcXML toolkit
    - Dublin Core to MARCXML Stylesheet
  - OAI community developed tools, mostly for IT staff
  - MarcEdit (Terry Reese)
    - Metadata Harvester, MARC Editor
    - Low-barrier harvester, can be used by catalogers

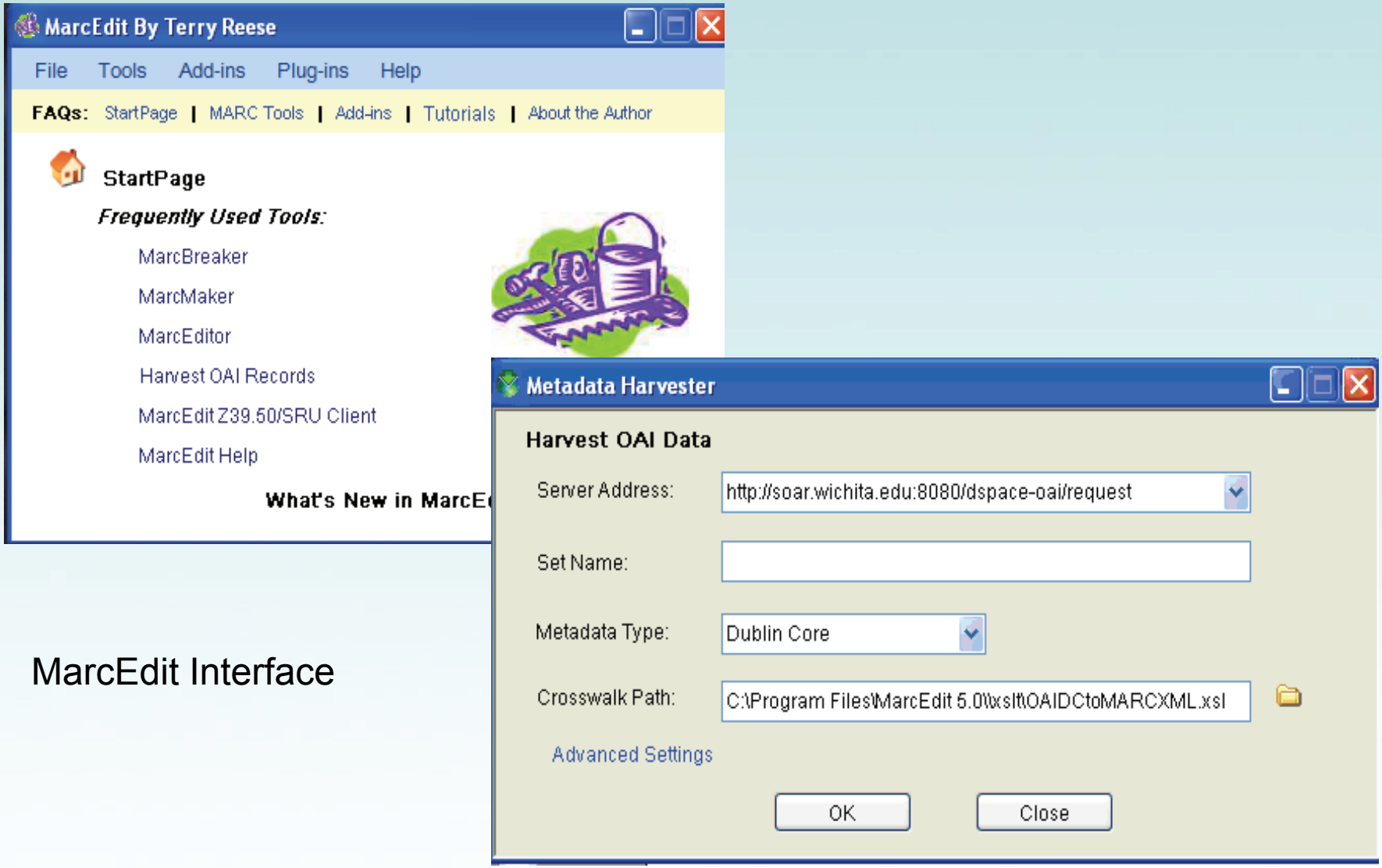
Sample Record in SOAR (Dublin Core)

DC Field	Value
dc.contributor.author	Niles, Rae-
dc.date.accessioned	2006-12-24T14:56:10Z
dc.date.available	2006-12-24T14:56:10Z-
dc.date.copyright	2006
dc.date.issued	2006-05
dc.identifier.other	d06005
dc.identifier.uri	http://hdl.handle.net/10057/373-
dc.description	Thesis (Ed.D.)--Wichita State University, College of Education.en
dc.description	"May 2006."
dc.description	Includes bibliographic references (leaves 129-145).en
dc.description.abstract	The purpose of this study was to describe and identify Sedgwick High School's teacher and student perceptions of the impact of one-to-one laptop computer access using an appreciative inquiry theoretical research perspective and the theoretical frameworks of change and paradigm shift…
dc.format.extent	xiv, 167 leaves : digital, PDF file.
dc.format.extent	1174852 bytes-
dc.format.mimetype	application/pdf-
dc.language.iso	en_US
dc.rights	Copyright Rae Niles, 2006. All rights reserved.
dc.subject.lcsh	Educational technology
dc.subject.lcsh	Education--Data processing
dc.subject.lcsh	Electronic dissertations
dc.title	A study of the application of emerging technology: teacher and student perceptions of the impact of one-to-one laptop computer access
dc.type	Dissertation
dc.thesis.adviser	Calabrese, Raymond L.
dc.identifier.oclc	71805797-
Appears in Collections:	EL Theses and Dissertations COE Theses and Dissertations Dissertations

Dublin Core to MARC Mapping

Fields in DSpace	Transformed MARC fields in OCLC (What we want)
dc.contributor.author ➔	100 1 _ Author.
dc.date.accessioned ➔	
dc.date.available ➔	
dc.date.copyright ➔	
dc.date.issued ➔	260 ǂc year.
dc.identifier.other ➔	099 ……
dc.identifier.uri ➔	856 4 0 …
dc.description ➔	502 Thesis (Ed.D.)--Wichita State University, College of …
dc.description ➔	500 "Month year."
dc.description ➔	504 Includes bibliographic references…
dc.description.abstract ➔	520 3 _ …
dc.format.extent ➔	300
dc.format.extent ➔	
dc.format.mimetype ➔	
dc.language.iso ➔	546 en_US
dc.rights ➔	540 Access restricted to WSU students, faculty and staff (delete)
dc.subject ➔	690 (keywords, non CV, delete)
dc.subject.lcsh ➔	650 _ 0
dc.title ➔	245 1 _ …
dc.type ➔	655 _ 7 Dissertation ǂ2 local
dc.thesis.adviser ➔	700 1 2 … ǂe advisor
dc.identifier.oclc ➔	856 4 1 …
Appears in Collections: ➔	

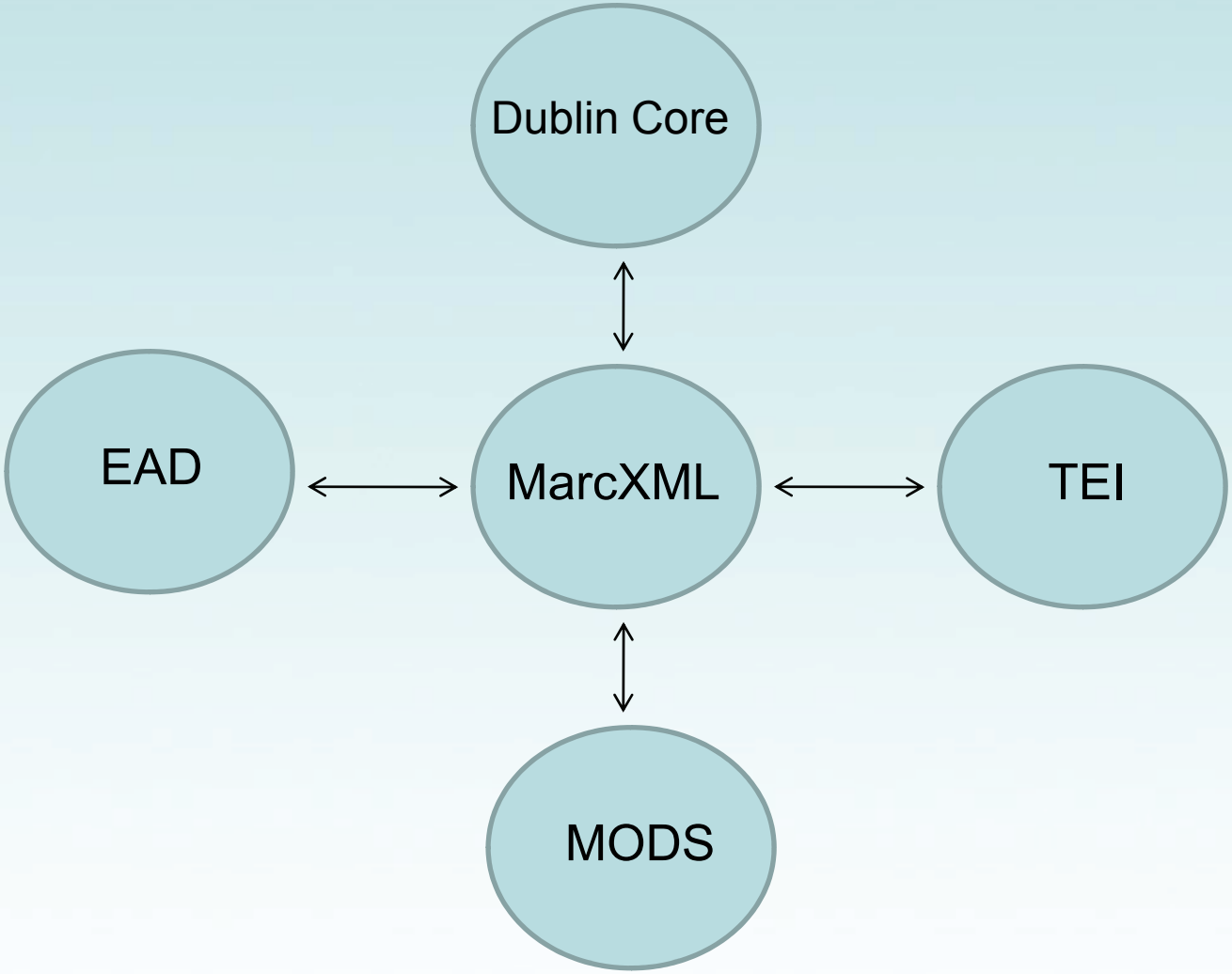
Using MarcEdit



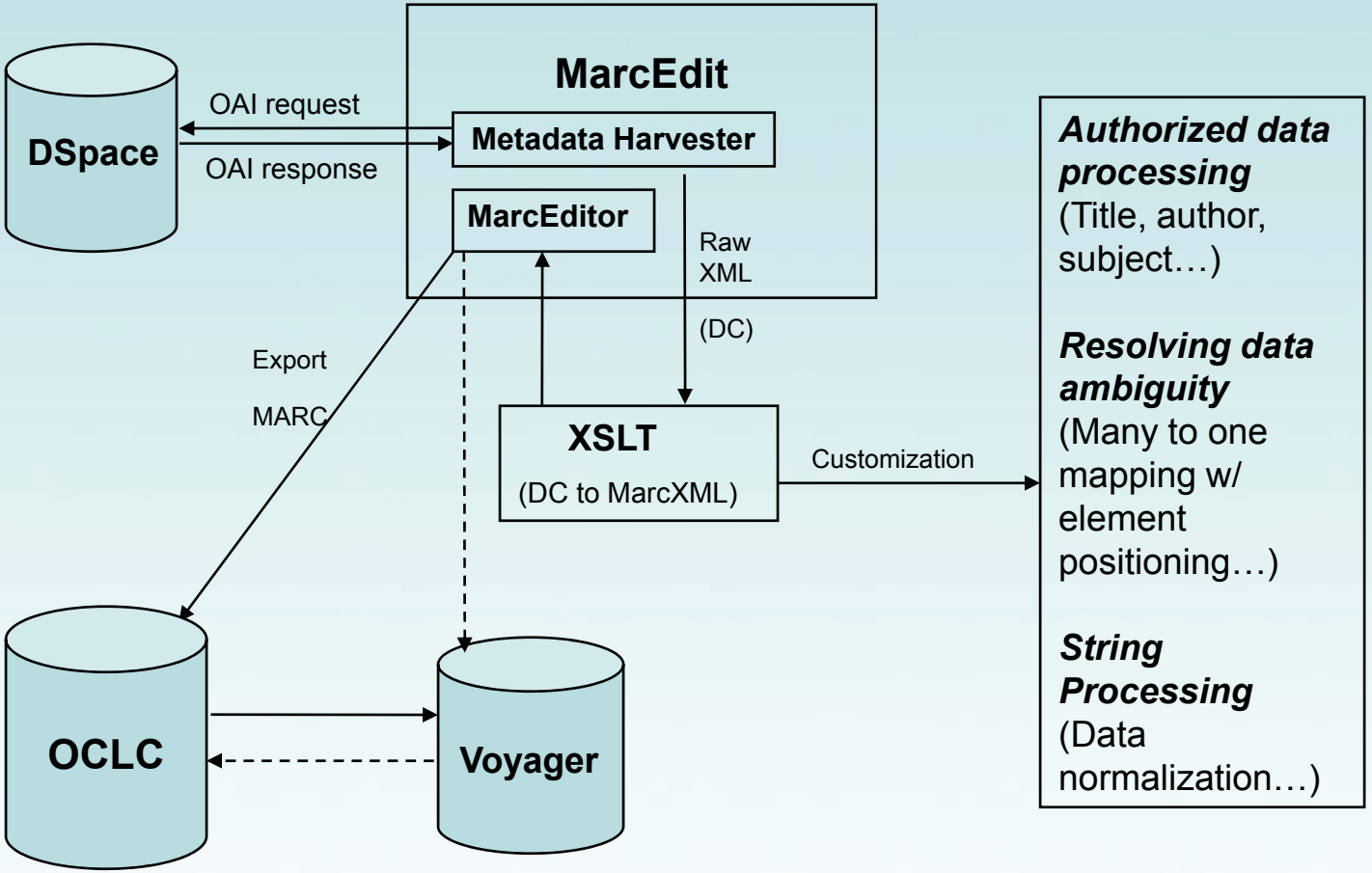
MarcEdit Interface

Metadata transformation in MarcEdit

- The wheel and spoke design for metadata transformation (by Reese)

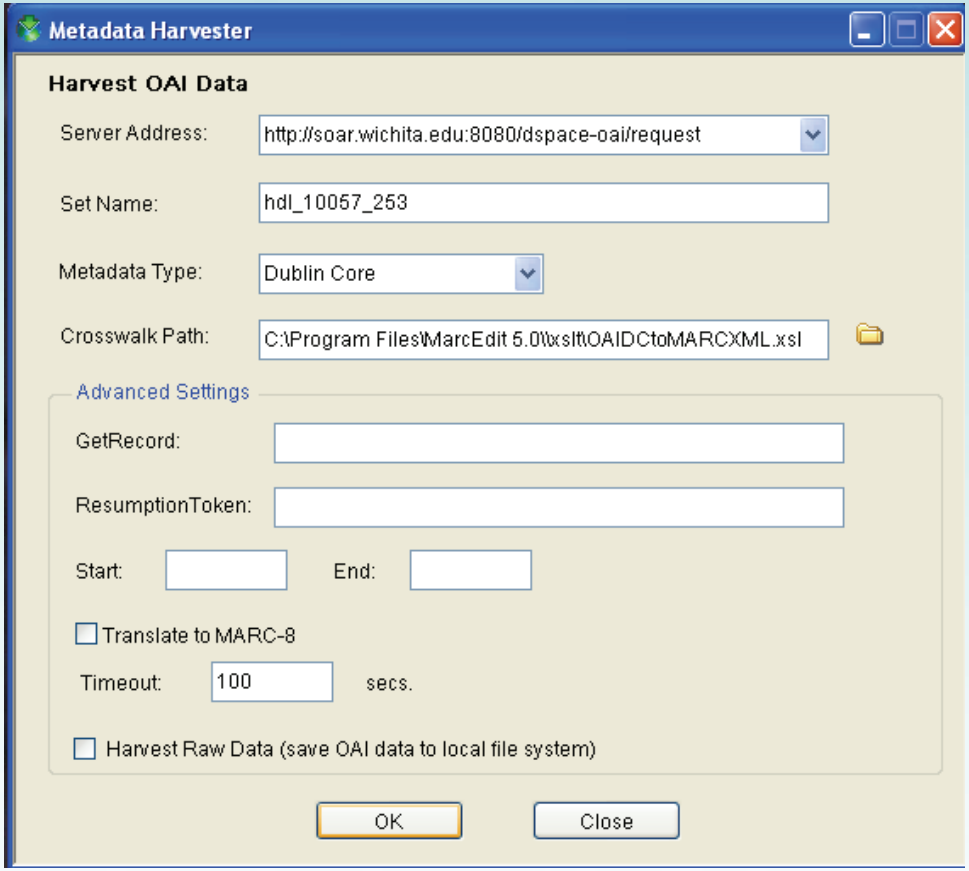


Data Flow Diagram



Selective Harvesting

- **Define in MarcEdit**
  - by identifier (e.g. oai:soar.wichita.edu:10057/255)
  - by set (e.g. hdl_10057_351)
  - by date (e.g. from=2007-01-01&until=2008-01-01)
- Or, http://soar.wichita.edu/dspace-oai/request?verb=ListRecords&metadataPrefix=oai_dc&from=2007-01-01&until=2008-01-01
- **How do we define harvesting theses only?**
  - **Define by set** (http://soar.wichita.edu/dspace-oai/request?verb=ListSets)
    - **Sets by schools and departments**
      - AE Theses and Dissertations (hdl_10057_313)
      - ANTH Theses (hdl_10057_233)
      - BIO Theses (hdl_10057_389)
      - CE Theses and Dissertations
      - …
    - **Or sets in two categories**
      - Master's These (hdl_10057_351)
      - Dissertations (hdl_10057_352)



Alternatively, Define Theses Sets in XSLT

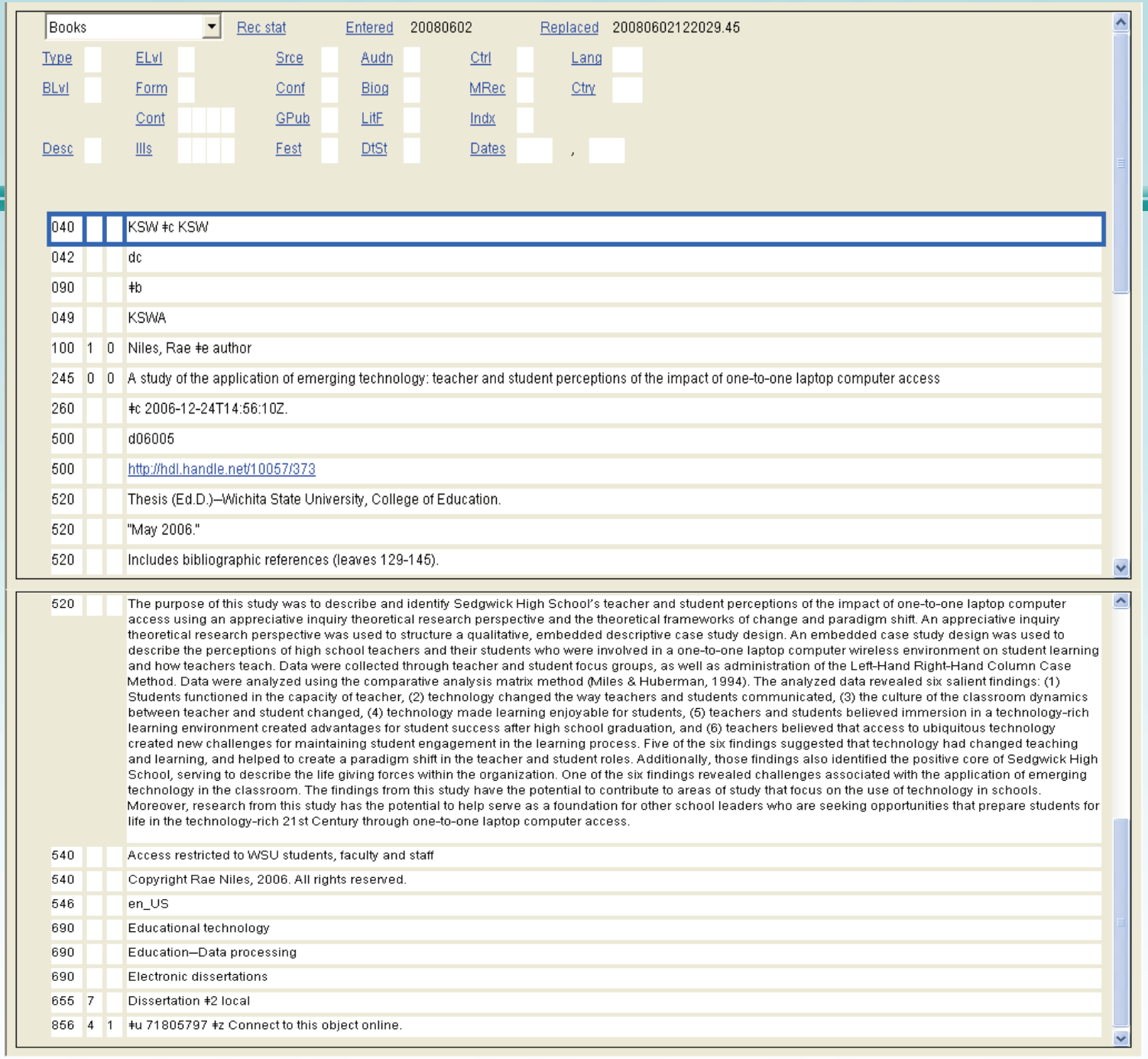
- **Dublin Core to MARCXML Stylesheet**

```
<?xml version="1.0" encoding="UTF-8" ?>
- <xsl:stylesheet version="1.0" xmlns:dc="http://purl.org/dc/elements/1.1/"
 xmlns:dcterms="http://purl.org/dc/terms/1.1"
 xmlns:oai_dc="http://www.openarchives.org/OAI/2.0/oai_dc/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xsi:schemaLocation="http://www.openarchives.org/OAI/2.0/oai_dc/
 http://www.openarchives.org/OAI/2.0/oai_dc.xsd" xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
 xmlns="http://www.loc.gov/MARC21/slim" exclude-result-prefixes="dc dcterms oai_dc">
 <xsl:import href="MARC21slimUtils.xsl" />
 <xsl:output method="xml" encoding="UTF-8" indent="yes" />
 - <xsl:template match="/">
 - <collection xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xsi:schemaLocation="http://www.loc.gov/MARC21/slim
 http://www.loc.gov/standards/marcxml/schema/MARC21slim.xsd">
  <xsl:apply-templates />
  </collection>
 </xsl:template>
- <xsl:template name="OAI-PMH">
 - <xsl:for-each select="ListRecords/record/metadata/oai_dc:dc">
  <xsl:apply-templates />
 </xsl:for-each>
 - <xsl:for-each select="GetRecord/record/metadata/oai_dc:dc">
    <xsl:apply-templates />
  </xsl:for-each>
 </xsl:template>
```

XSLT Customization: Transform and Display Theses and Dissertations Only

```
<record>
  <xsl:variable name="myType" select="dc:type" />
   - <xsl:choose>
     - <xsl:when test="($myType!='') and (($myType='Thesis') or ($myType='Dissertation'))">
       - <xsl:element name="leader">
       <xsl:variable name="type" select="dc:type" />
       - <xsl:variable name="leader06">
    - <xsl:choose>
      <xsl:when test="$type='collection'">p</xsl:when>
       <xsl:when test="$type='dataset'">m</xsl:when>
       <xsl:when test="$type='event'">r</xsl:when>
       <xsl:when test="$type='image'">k</xsl:when>
       <xsl:when test="$type='interactive resource'">m</xsl:when>
       <xsl:when test="$type='service'">m</xsl:when>
       <xsl:when test="$type='software'">m</xsl:when>
       <xsl:when test="$type='sound'">i</xsl:when>
       <xsl:when test="$type='text'">a</xsl:when>
       <xsl:when test="($type='Thesis') or ($type='Dissertation')">t</xsl:when>
     <xsl:otherwise>a</xsl:otherwise>
    </xsl:choose>
    …
```

Sample Result Exported to OCLC



Books | Rec stat | Entered 20080602 | Replaced 20080602122029.45

Type | ELvl | Srce | Audn | Ctrl | Lang

BLvl | Form | Conf | Biog | MRec | Ctry

Cont | GPub | LitF | Indx

Desc | Ills | Fest | DtSt | Dates

040			KSW ǂc KSW
042			dc
090			ǂb
049			KSWA
100	1	0	Niles, Rae ǂe author
245	0	0	A study of the application of emerging technology: teacher and student perceptions of the impact of one-to-one laptop computer access
260			ǂc 2006-12-24T14:56:10Z.
500			d06005
500			http://hdl.handle.net/10057/373
520			Thesis (Ed.D.)--Wichita State University, College of Education.
520			"May 2006."
520			Includes bibliographic references (leaves 129-145).
520			The purpose of this study was to describe and identify Sedgwick High School's teacher and student perceptions of the impact of one-to-one laptop computer access using an appreciative inquiry theoretical research perspective and the theoretical frameworks of change and paradigm shift. An appreciative inquiry theoretical research perspective was used to structure a qualitative, embedded descriptive case study design. An embedded case study design was used to describe the perceptions of high school teachers and their students who were involved in a one-to-one laptop computer wireless environment on student learning and how teachers teach. Data were collected through teacher and student focus groups, as well as administration of the Left-Hand Right-Hand Column Case Method. Data were analyzed using the comparative analysis matrix method (Miles & Huberman, 1994). The analyzed data revealed six salient findings: (1) Students functioned in the capacity of teacher, (2) technology changed the way teachers and students communicated, (3) the culture of the classroom dynamics between teacher and student changed, (4) technology made learning enjoyable for students, (5) teachers and students believed immersion in a technology-rich learning environment created advantages for student success after high school graduation, and (6) teachers believed that access to ubiquitous technology created new challenges for maintaining student engagement in the learning process. Five of the six findings suggested that technology had changed teaching and learning, and helped to create a paradigm shift in the teacher and student roles. Additionally, those findings also identified the positive core of Sedgwick High School, serving to describe the life giving forces within the organization. One of the six findings revealed challenges associated with the application of emerging technology in the classroom. The findings from this study have the potential to contribute to areas of study that focus on the use of technology in schools. Moreover, research from this study has the potential to help serve as a foundation for other school leaders who are seeking opportunities that prepare students for life in the technology-rich 21st Century through one-to-one laptop computer access.
540			Access restricted to WSU students, faculty and staff
540			Copyright Rae Niles, 2006. All rights reserved.
546			en_US
690			Educational technology
690			Education--Data processing
690			Electronic dissertations
655	7		Dissertation ǂ2 local
856	4	1	ǂu 71805797 ǂz Connect to this object online.

Mapping Problems and Error Reports (for Variable Fields)

- 100 occurrence 1, indicator 2 - invalid code
- 520 occurrence 4, $a occurrence 1, position 76 - invalid character - data must be ALA characters
- 655 occurrence 1, indicator 1 - invalid code
- 655 occurrence 1, indicator 2 - invalid code
- 655 occurrence 1, $2 - invalid relationship - when element is present, then 655 indicator 2 must equal 7
- …
- Need customization to meet our needs.

Mapping Test Results Using OAIDCtoMARCXML.xsl (in MarcEdit)

- DSpace (version 1.4 or below) only responds with simple Dublin Core xml file (to be transformed to MarcXML using xslt).

Fields in DSpace	Transformed fields in OCLC	Correction and Customization Needed
dc.contributor.author	➔ 100 1 0 Niles, Rae ǂe author	(Delete ǂe author.)
dc.date.accessioned	➔	
dc.date.available	➔	
dc.date.copyright	➔	
dc.date.issued	➔ 260 ǂc 2006-05	(Only keep 2006)
dc.identifier.other	➔ 500 d06005	(Change to 099)
dc.identifier.uri	➔ 500 http://hdl.handle.net/10057/373	(Change to 856 4 0)
dc.description	➔ 520 Thesis (Ed.D.)--Wichita State University, College of Education.	(Change to 502)
dc.description	➔ 520 "May 2006."	(Change to 500)
dc.description	➔ 520 Includes bibliographic references (leaves 129-145).	(Change to 504)
dc.description.abstract	➔ 520 The purpose of this study was to describe and identify Sedgwick High School's teacher and student perceptions of the impact of one-to-one laptop computer access using an appreciative inquiry theoretical research perspective and the theoretical frameworks of change and paradigm shift...	(Change to 520 3)
dc.format.extent	➔	
dc.format.extent	➔	
dc.format.mimetype	➔	
dc.language.iso	➔ 546 en_US	(delete)
dc.rights	➔ 540 Access restricted to WSU students, faculty and staff	(delete)
dc.subject.lcsh	➔ 690 Educational technology	(Change to 650 _0)
dc.subject.lcsh	➔ 690 Education--Data processing	
dc.subject.lcsh	➔ 690 Electronic dissertations	
dc.title	➔ 245 0 0 A study of the application of emerging technology: teacher and student perceptions of the impact of one-to-one laptop computer access	(if 100 exists, use 245 1_; or else use 245 0_)
dc.type	➔ 655 7 _ Dissertation ǂ2 local	(Change to 655 _7)
dc.thesis.adviser	➔	(Add 700 1 2 … ǂe advisor.)
dc.identifier.oclc	➔856 4 1 ǂu 71805797 ǂz Connect to this object online.	(replace ǂu with value from dc.identifier.uri)
Appears in Collections:	➔	

Customized Mapping in XSLT

- **Resolving data ambiguity**
  - **Same DC fields to different MARC fields:**
    - description → 502(Dissertation)
      500(General Note)
      504 (Bibliography)
  - **Qualified DC element:**
    - description.abstract → 520(Summary)
  - **Solution: element positioning**

```
<xsl:for-each select="dc:description[1]">
 - <datafield tag="502" ind1="" ind2="">
   - <subfield code="a">
      <xsl:value-of select="normalize-space(.)" />
     </subfield>
  </datafield>
 </xsl:for-each>
<xsl:for-each select="dc:description[2]">
 - <datafield tag="500" ind1="" ind2="">
   - <subfield code="a">
      <xsl:value-of select="normalize-space(.)" />
     </subfield>
  </datafield>
 </xsl:for-each>
…
```

Customized Mapping in XSLT

Authorized data processing

- **Primary entries vs. added entries: title and personal names processing**
  - **Template to deal with personal names (in MarcEdit)**
    - E.g. <dc:creator>Webb, Kyle M.</dc:creator>
      <dc:creator>Webb, Kyle M., 1977 -</dc:creator>
      transformed to
      =100 1\$aWebb, Kyle M.
      =100 1\$aWebb, Kyle M., $d1977-
  - **Identify field relationship and correct indicators**
    100, 245 (author, title) relationship: if 100 exists, 245 1 _
    or else, 245 0 _
  - **Local element: dc.thesis.advisor** transformed to 700 1_
    (If more than one dc.thesis exists, positioning is needed.)

Customized Mapping in XSLT

- **Processing of non-filing characters in title**
  - **245 (title) 2nd indicator: a, an, the… (2, 3, 4)**

```
<xsl:for-each select="dc:title[1]">
 - <xsl:choose>
   - <xsl:when test="$exist100!="">
     - <xsl:choose>
       - <xsl:when test="substring(., 1, 2)='A '">
         - <datafield tag="245" ind1="1" ind2="2">
           - <xsl:choose>
             - <xsl:when test="contains(.,':')">
               - <subfield code="a">
                   <xsl:value-of select="concat(substring-before(.,':'),' : ')" />
                 </subfield>
               - <subfield code="b">
                   <xsl:value-of select="concat(substring-after(.,':'),' / ')" />
                 </subfield>
               </xsl:when>
               …
```

  - Alternatively, it can be defined **in the title template.**

Customized Mapping in XSLT

- **Subjects vs. Keywords**
  - **Only kept common subject in the test** (when keywords and subjects mixed inconsistently)

```
- <xsl:for-each select="dc:subject">
 - <xsl:if test=".='Electronic dissertations'">
  - <datafield tag="650" ind1="" ind2="0">
   - <subfield code="a">
     <xsl:value-of select="." />
    </subfield>
     …
```

  - **Subject template** (OSU solution)
    - <dc:subject>ocean wave energy</dc:subject>
      <dc:subject>direct-drive</dc:subject>
      <dc:subject>fluid-structure interaction</dc:subject>
      <dc:subject>Ocean wave power</dc:subject>
      <dc:subject>Fluid-structure interaction</dc:subject>
      Transformed to
      =650 \0$aOcean wave power.
      =650 \0$aFluid-structure interaction.
      =690 \\$aocean wave energy.
      =690 \\$adirect-drive.
      =690 \\$afluid-structure interaction.

Customized Mapping in XSLT

- **String Processing**
  - **Functions**
    - normalize-space()
    - translate()
    - substring()…
  - **Example: Extract partial value from DC element**
    - 260 (Date): only extract year from the issuing date in DC

```
- <xsl:for-each select="dc:date[4]">
  - <xsl:if test=".!="">
    - <datafield tag="260" ind1="" ind2="">
      - <subfield code="c">
        <xsl:value-of select="substring(.,1,4)" />
        .
      </subfield>
    </datafield>
  </xsl:if>
</xsl:for-each>
```

Customized Mapping in XSLT

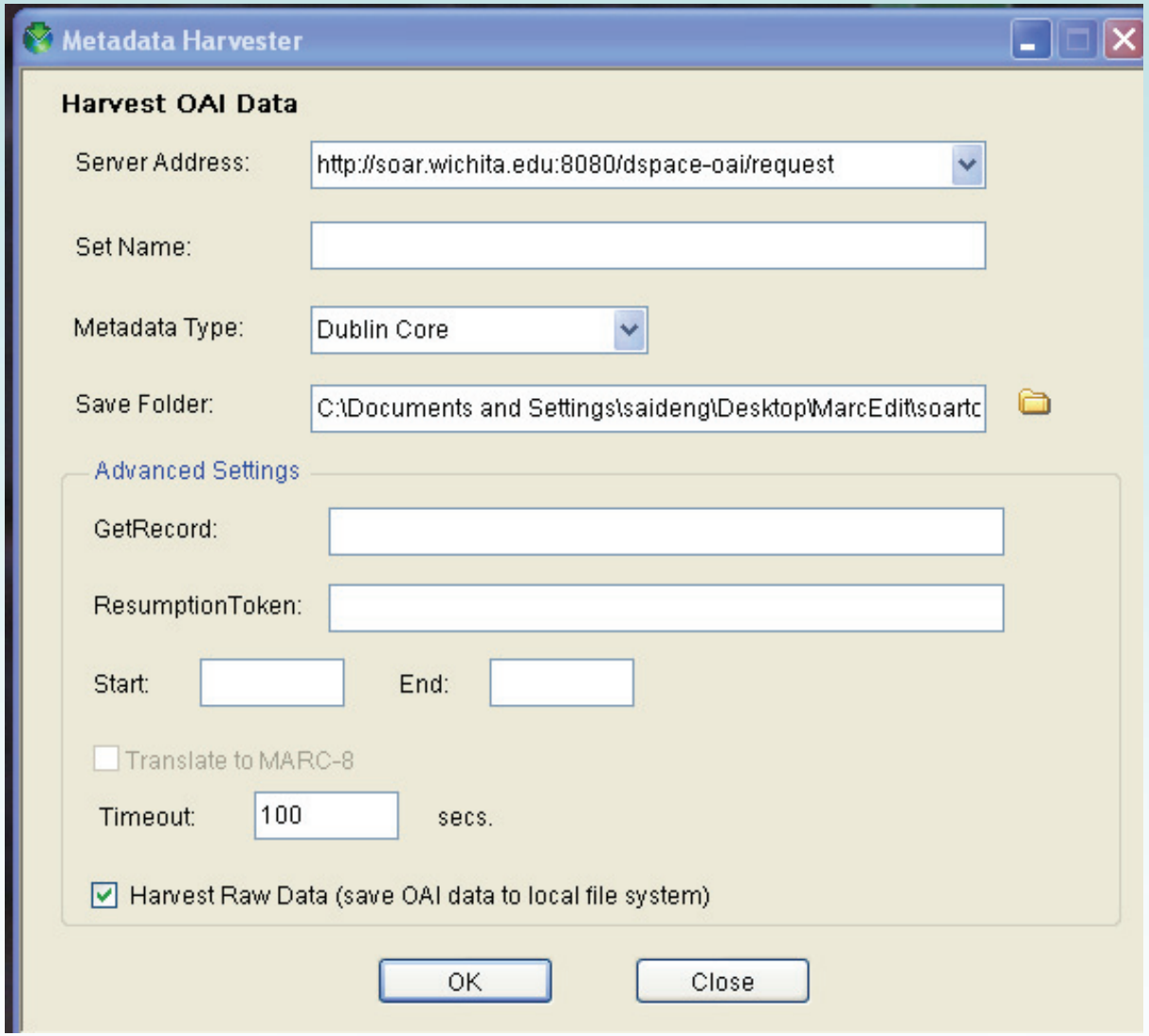
- **Leaders:** fixed fields that comprise the first 24 character positions (00-23) of each MARC record. They provide information for the processing of the record.

- **008 field (Fixed-Length Data Elements)**
  - Type (t, manuscript language material) BLvl (m, Encoding level is monograph)
  - Desc (a) ELvl (I, encoding level is full level) Form (s, form of item is electronic)
  - Cont (b, m, content is theses with bibliographies) Ills (a, illustration included)
  - Srce (d, cataloging source) Conf (0, not a conference publication)
  - Fest (0, not a festschrift) LitF (0, not fiction) DtSt (s, single date)
  - Indx (0, no index) Lang (eng, language is English) Ctry (xx)

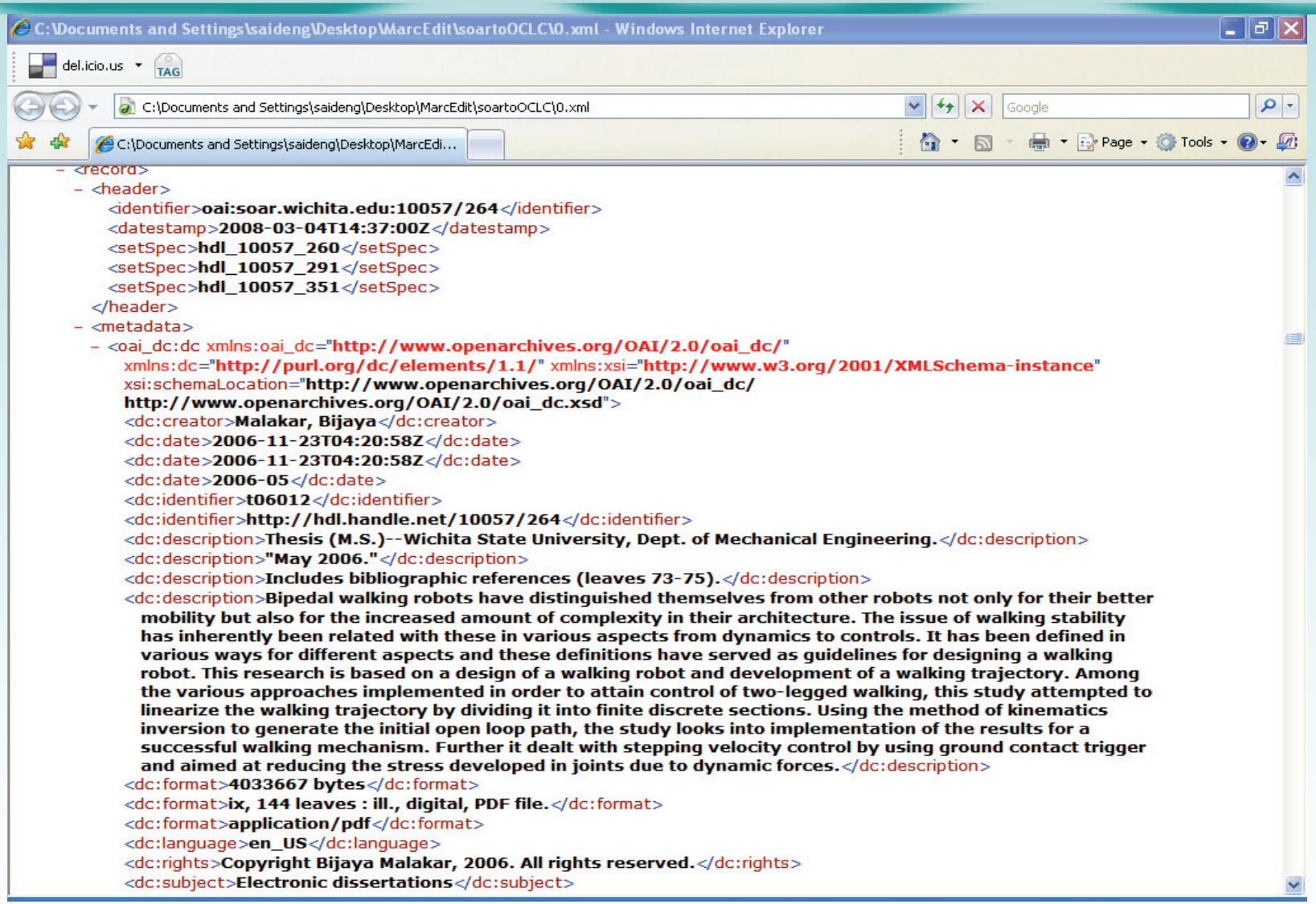
- Ways to handle:
  - Scripting and adding all fixed fields (leader and 008 fields) in OAIDCtoMARCXML.xsl;
  - Or, Adding 008 in MarcEditor after record export;
  - Or, applying fixed field template after records being exported to OCLC.

Harvesting Using the Revised XSLT Crosswalk

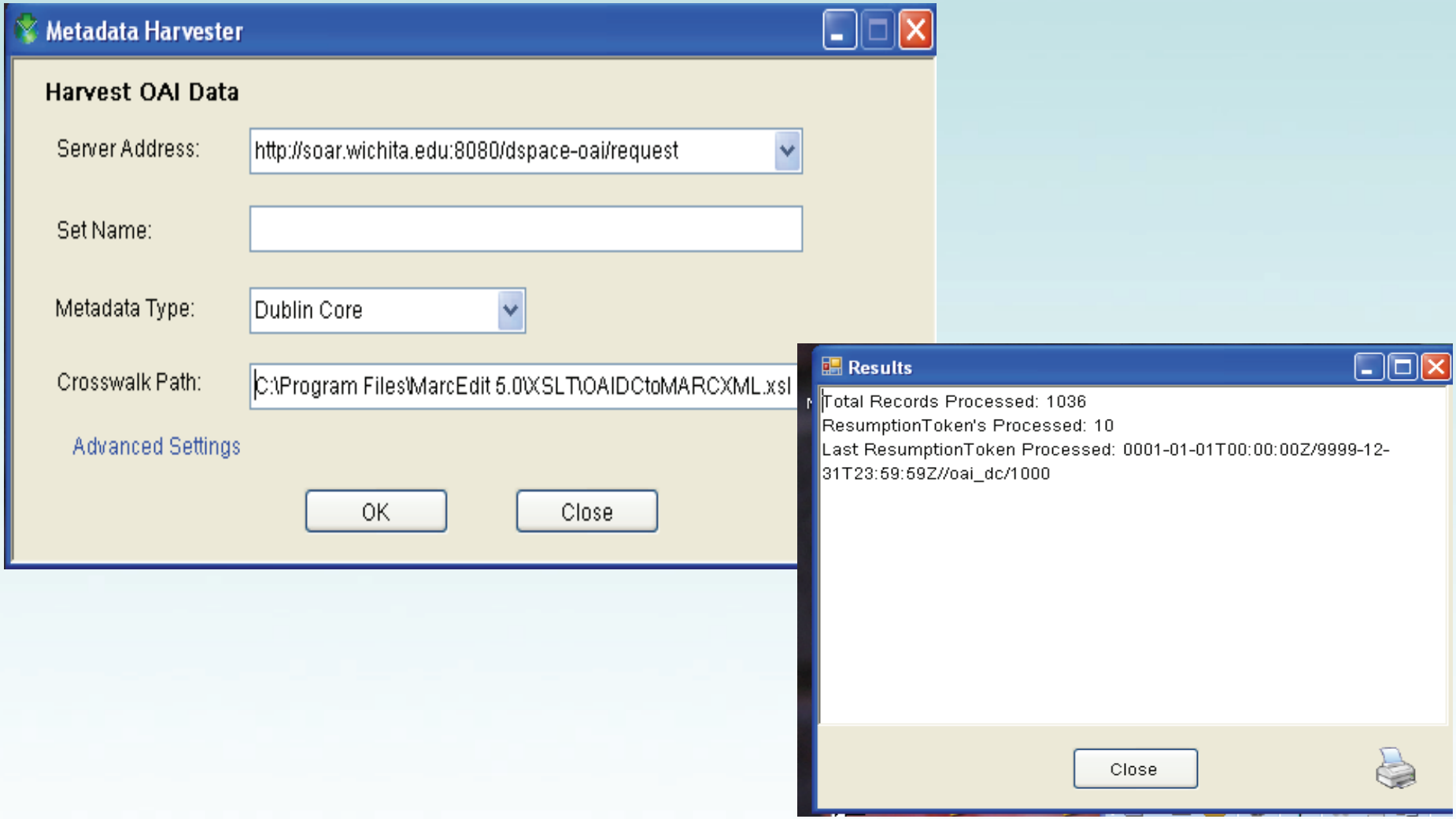
- Harvest Raw Data



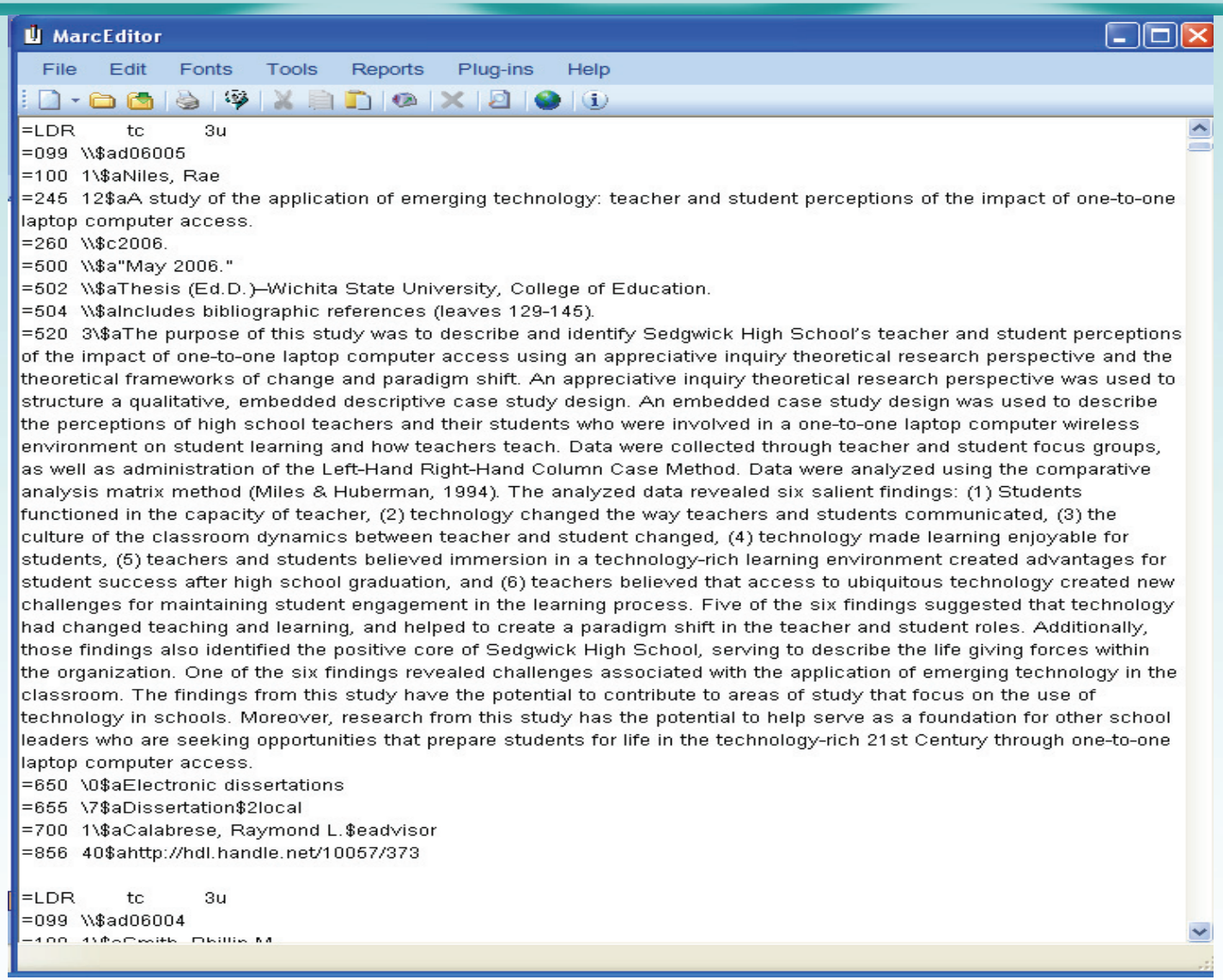
Raw DC XML (Harvest oai Data to Local File)



Harvest and Transform DC to MarcXML



Records will be Dumped to MarcEdit-MarcEditor



MarcEditor

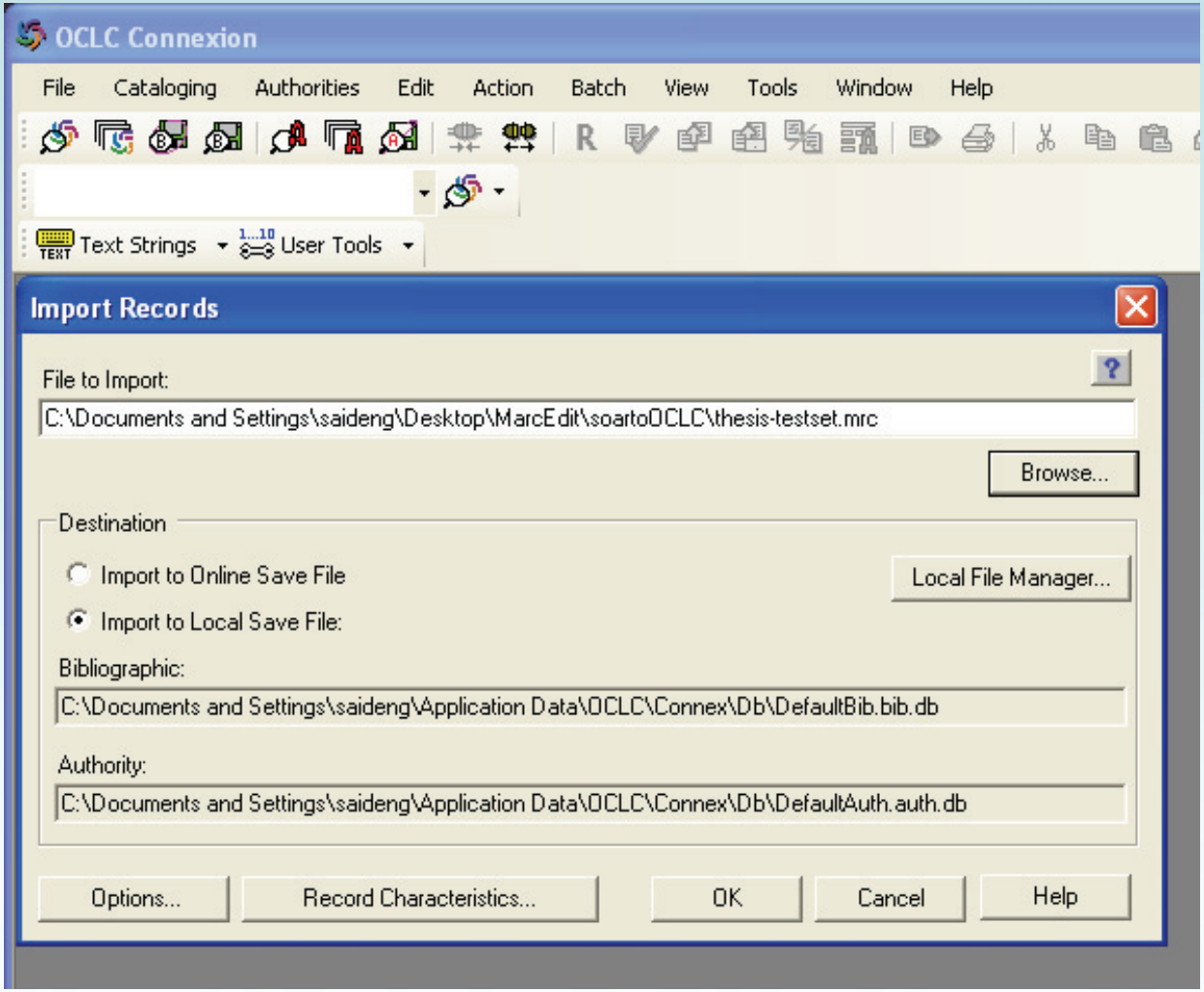
- **Edit harvested theses in MarcEditor**
  - Batch edit fields, subfields, indicators (if needed)
    - E.g.: add 008 field for all records
  - .mrk (MARC text file) → Compile to .mrc (MARC)

  Or

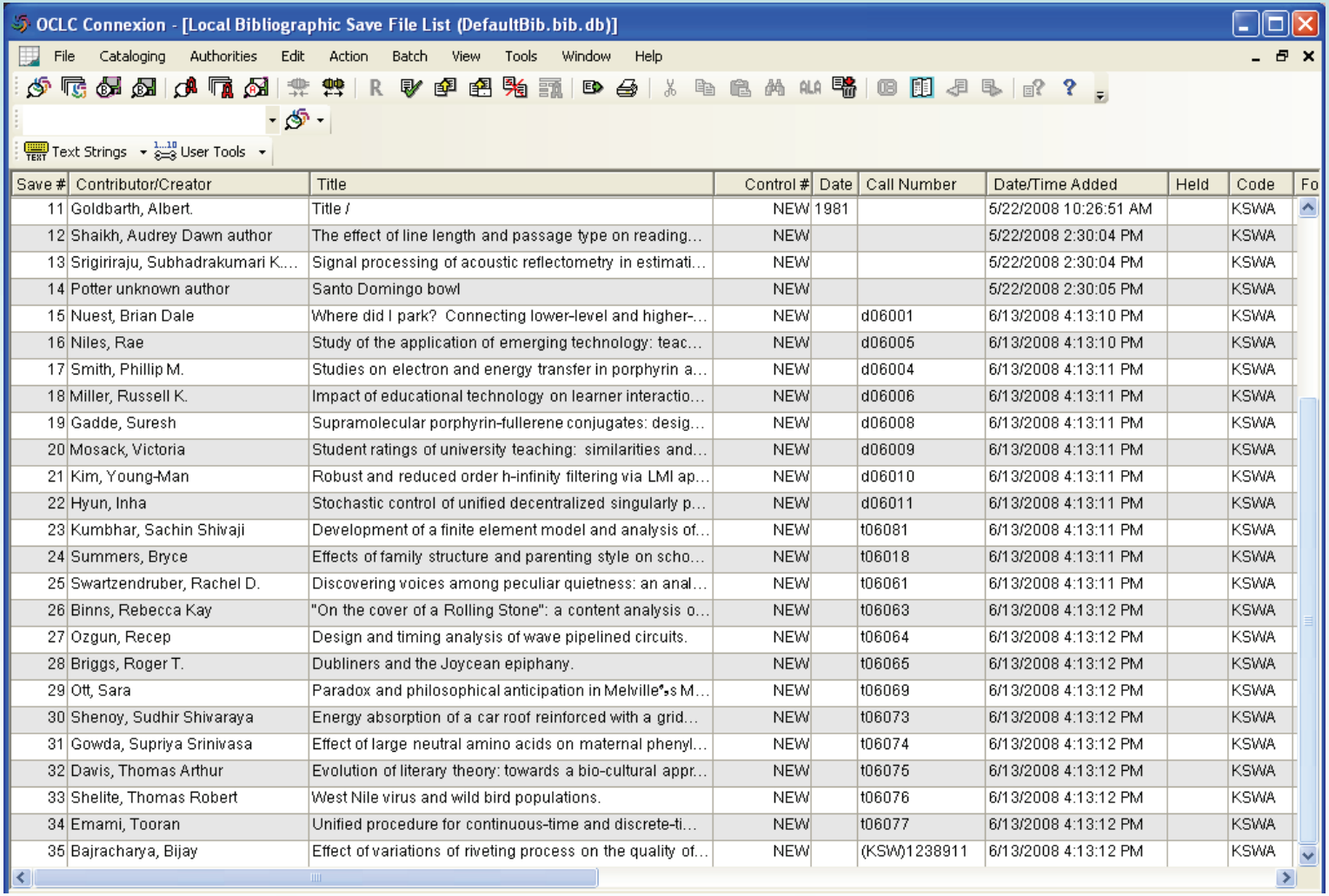
  - Save as .mrk8 (MARC UTF8 text file) → Compile to .mrc (MARC)

Import Records to OCLC

- Click “File-Import Records…”
- Select “Import to Local Save File”



Import Records to OCLC

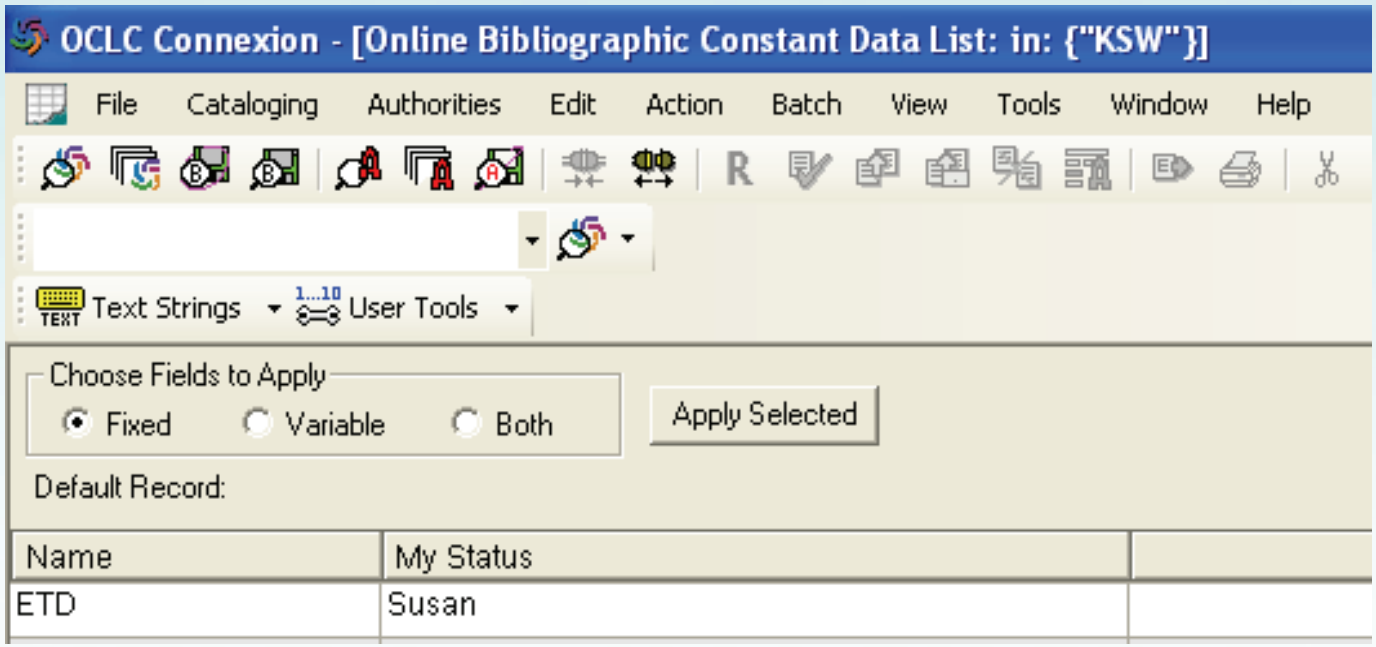


Save #	Contributor/Creator	Title	Control #	Date	Call Number	Date/Time Added	Held	Code	Fo
11	Goldbarth, Albert.	Title /	NEW	1981		5/22/2008 10:26:51 AM		KSWA	
12	Shaikh, Audrey Dawn author	The effect of line length and passage type on reading...	NEW			5/22/2008 2:30:04 PM		KSWA	
13	Srigiriraju, Subhadrakumari K....	Signal processing of acoustic reflectometry in estimati...	NEW			5/22/2008 2:30:04 PM		KSWA	
14	Potter unknown author	Santo Domingo bowl	NEW			5/22/2008 2:30:05 PM		KSWA	
15	Nuest, Brian Dale	Where did I park? Connecting lower-level and higher-...	NEW		d06001	6/13/2008 4:13:10 PM		KSWA	
16	Niles, Rae	Study of the application of emerging technology: teac...	NEW		d06005	6/13/2008 4:13:10 PM		KSWA	
17	Smith, Phillip M.	Studies on electron and energy transfer in porphyrin a...	NEW		d06004	6/13/2008 4:13:11 PM		KSWA	
18	Miller, Russell K.	Impact of educational technology on learner interactio...	NEW		d06006	6/13/2008 4:13:11 PM		KSWA	
19	Gadde, Suresh	Supramolecular porphyrin-fullerene conjugates: desig...	NEW		d06008	6/13/2008 4:13:11 PM		KSWA	
20	Mosack, Victoria	Student ratings of university teaching: similarities and...	NEW		d06009	6/13/2008 4:13:11 PM		KSWA	
21	Kim, Young-Man	Robust and reduced order h-infinity filtering via LMI ap...	NEW		d06010	6/13/2008 4:13:11 PM		KSWA	
22	Hyun, Inha	Stochastic control of unified decentralized singularly p...	NEW		d06011	6/13/2008 4:13:11 PM		KSWA	
23	Kumbhar, Sachin Shivaji	Development of a finite element model and analysis of...	NEW		t06081	6/13/2008 4:13:11 PM		KSWA	
24	Summers, Bryce	Effects of family structure and parenting style on scho...	NEW		t06018	6/13/2008 4:13:11 PM		KSWA	
25	Swartzendruber, Rachel D.	Discovering voices among peculiar quietness: an anal...	NEW		t06061	6/13/2008 4:13:11 PM		KSWA	
26	Binns, Rebecca Kay	"On the cover of a Rolling Stone": a content analysis o...	NEW		t06063	6/13/2008 4:13:12 PM		KSWA	
27	Ozgun, Recep	Design and timing analysis of wave pipelined circuits.	NEW		t06064	6/13/2008 4:13:12 PM		KSWA	
28	Briggs, Roger T.	Dubliners and the Joycean epiphany.	NEW		t06065	6/13/2008 4:13:12 PM		KSWA	
29	Ott, Sara	Paradox and philosophical anticipation in Melville"s M...	NEW		t06069	6/13/2008 4:13:12 PM		KSWA	
30	Shenoy, Sudhir Shivaraya	Energy absorption of a car roof reinforced with a grid...	NEW		t06073	6/13/2008 4:13:12 PM		KSWA	
31	Gowda, Supriya Srinivasa	Effect of large neutral amino acids on maternal phenyl...	NEW		t06074	6/13/2008 4:13:12 PM		KSWA	
32	Davis, Thomas Arthur	Evolution of literary theory: towards a bio-cultural appr...	NEW		t06075	6/13/2008 4:13:12 PM		KSWA	
33	Shelite, Thomas Robert	West Nile virus and wild bird populations.	NEW		t06076	6/13/2008 4:13:12 PM		KSWA	
34	Emami, Tooran	Unified procedure for continuous-time and discrete-ti...	NEW		t06077	6/13/2008 4:13:12 PM		KSWA	
35	Bajracharya, Bijay	Effect of variations of riveting process on the quality of...	NEW		(KSW)1238911	6/13/2008 4:13:12 PM		KSWA	

After Being Exported to OCLC…

- **In OCLC Connexion client:**

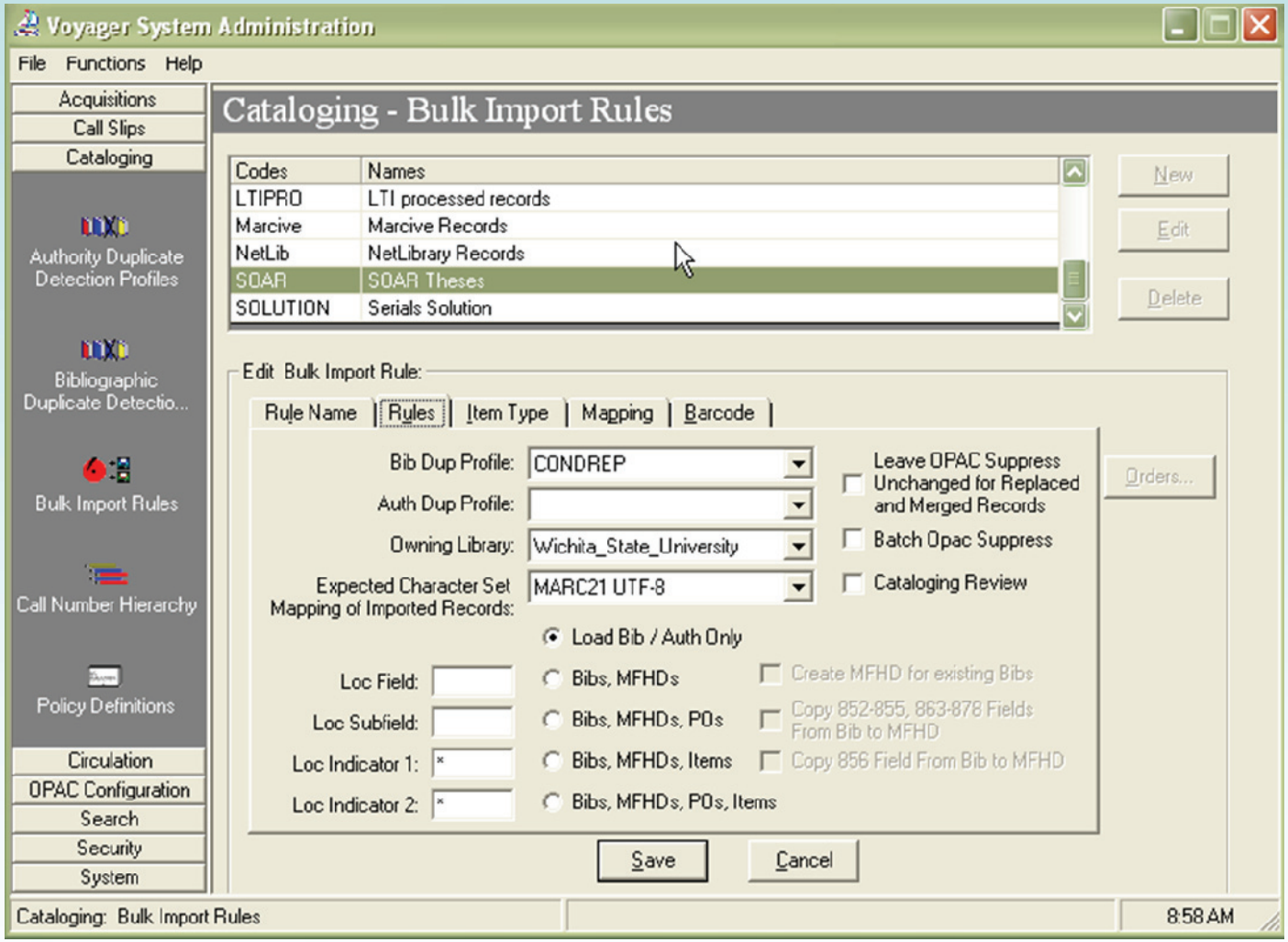
  Open each file, do some review/editing as needed, attach KSW holding and apply fixed field template of ETD (if needed) in OCLC.



Alternatively, records exported to Voyager directly

- This part is performed by Gemma Blackburn.
- Send .mrc file to the Voyager server.
- Create a Bulk Import rule in Voyager System Administration module.
  - Go to: Cataloging → Bulk Import Rules → New
  - Name the rule
  - Choose (or create a new) Bib De-Duplication Rule
  - Modify mapping as needed
  - Save the rule

Voyager System Administration Bulk import rules screenshot



Bulk import to Voyager

- Bulk Import the records using the Bulk Import rule
  - On your Voyager server, go to: .../voyager/xxxdb/sbin/
  - Write the command for Bulk Import to run: Pbulkimport –ftheses-sample.mrc –iSOAR –b1 –e3
    - –f and the file name (required)
    - –i and the Bulk Import rule name (required)
    - –o and your name (not required, but will let people know who ran the bulk import)
    - –b and a number. This will define the beginning record in the file that you want to import if you prefer to import a select set at a time (not required)
    - –e and a number. This will define the end record in a set to import (not required)
    - There are several other options. Check the Technical User's Guide

A real case

- Transformation of ETDs of 2007
  - Ph.D. Dissertations (Summer, Fall 2007): 23
  - Master's Theses (Summer, Fall 2007): 55
- Some adjustment in the transformation:
  - Transfer dc.format.extent[1] to physical description (Marc 300)
    - E.g. ix, 53 leaves, ill. → 300 $a ix, 53 leaves : $b ill.
  - Keep 3 description fields
    - description [1] → 500(General Note)
      description [2] → 502(Dissertation)
      description.abstract → 520(Summary)
  - 008 field values added in MarcEditor rather than applied in OCLC
    - E.g. =008 …s2008\\\\xx\\\\\\sbm\\\000\0\eng\d

Discussion and Conclusion

- The customized mapping and metadata transfer can eliminate the need of double entry in DSpace and OCLC/Voyager and significantly improve our ETD work flow.
- Metadata management
  - One single crosswalk and style sheet will not meet all needs;
  - Needs to be based on standard practice but add local variations;
  - Application-specific mapping is needed for special projects;
  - Coordination in metadata repurposing is important.
- Data mapping, manipulation and transformation
  - Using qualified DC instead of element positioning in XSLT;
    - DSpace 1.5 enables qualified DC crosswalk for OAI-PMH;
  - Handling of MARC fixed fields and 008 field.
- Other technical issues
  - Using other tools for harvesting besides MarcEdit;
  - Using DSpace Item Importer and Exporter instead of Metadata Harvester.

Project team and Acknowledgement

- Sai Deng, Metadata mapping and transformation
- Susan Matveyeva, ETD cataloging and mapping
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- Nancy Deyoe, Administrative Support
- Connie, Basquez, Voyager support
- Gemma Blackburn, Voyager support

Thank you!