Preparing School Library Media Specialists for Resource Description and Access (RDA)

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In particular, we want to present the basic FRBR and FRAD concepts and discuss them in the context of RDA implementation.

We will provide the correlation between AACR2 and RDA, including specific examples of a variety of formats: monograph, electronic resource, AV, etc.

Lastly, we discuss implementation options and vendor(s) interaction.
What do I need to learn about RDA?

- The main questions being asked are
  - How do we use it?
  - How do we implement it in our library?
  - Are the vendors creating new systems that use it?
  - Perhaps the most challenging aspect will be learning the complexity of the FRBR entity-relationship models in which information resources are classified as Works, Expressions, Manifestations, and Items (often referred to as WEMI).
Where we are and how we got here

- **Resource Description and Access** (RDA) replaces Anglo-American Cataloguing Rules, 2nd ed. (AACR2) in January 2010, as an online database product to incorporate the features and functionalities of online access. (JSC, website)
- Based in part on conceptual models in **Functional Requirements for Bibliographic Records (FRBR)** and **Functional Requirements for Authority Data (FRAD)**
- Motivated by:
  - Changes in technology
    - Impact on descriptive/access data
    - Book catalogs
    - Card catalogs
    - OPACs
    - Next generation
  - Move from the isolated individual library to incorporation of the international audience
  - Move from classes of materials to elements and values (more controlled vocabularies)
<table>
<thead>
<tr>
<th>How RDA Differs from AACR2</th>
<th>How RDA is similar to AACR2</th>
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<tr>
<td>• Not organized by form of item</td>
<td>• Most rules will not change</td>
</tr>
<tr>
<td>• Based on the Functional Requirements for Bibliographic Records (FRBR)</td>
<td>• Discusses description and access points</td>
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Intention of RDA

- Broaden the statement of principles (Paris Principles)
  - All types of resources (not just books)
  - Bibliographic relationships, descriptive cataloging, not Subject Cataloging at this time
  - Access (not just choice and form of entry, but all access for bibliographic and authority records)
- Builds on
  - Great cataloguing traditions of the world
  - FRBR and FRAR and future FR-Subjects
AACR2 vs. RDA: difference in proportions

**AACR2**
- Description of information entities—13 chapters (Part 1)
- Weak on access points; talks of main and added (MAP, AAP), have to look all over Part II for access point provisions (e.g., title access points are discussed in chapter 21 only and then only as a default provision, not much direction)
- Is not really based on the idea of a “work”, rather it is very much based on the unit record system.

AACR2 arranges chapters by the type of information resource and then by type of main or added access points. (see Tables 1 and 2) In AACR2’s Part I, chapters 2-12 each focus on a separate format and address only the description of the resources. It is weak on access points, even though Part II is devoted to choice and formation of personal, corporate body, title access points, and talks of main and added access points.
NOTE: This slide usually generates lots of discussion about the difference in “proportions” and the move away from main access point designation to “Preferred access points” and the differences that would make in the cataloging process (e.g., affect on using Cutter numbers)

“Each section will contain a chapter of general guidelines and chapters for the entities. Each chapter will be associated with one of the FRBR user tasks and one or more FRBR entities; for example, chapter 2 in section 1 will cover elements primarily used to identify a manifestation or item and chapter 19 in section 6 will cover elements primarily used to find a work. The chapters on recording attributes and relationships for the FRBR group 3 entities (concept, object, event, and place) will be placeholders, provided to allow a complete mapping to FRBR and FRAD and as a template for possible future development of RDA to cover these entities. Instructions on recording the attributes and relationships for places have been included, but will not initially go beyond the scope of AACR2 chapter 23.”

“In addition to these sections, there will be a General Introduction, Glossary, and various appendices, including those on capitalization, abbreviations, initial articles, and data presentation included in the current RDA Prospectus.”

(Joint Steering Committee for Development of RDA, Nov 2007)
How much will I have to re-learn?

- RDA now outlines the first step in creating a catalog record as deciding on the type of description to be represented, and not deciding on format, although format is still integral
- **Types of description** (rules 1.2)
  - Comprehensive, analytical, or multi-level description
- More emphasis on showing bibliographic relationships (e.g., taxonomy of bibliographic relationships) in order to better allow clustering of records
  - Read—works by B. Tillett, R. Smiraglia; M. Yee, S. Vellucci, E. O’Neill, D. Vizine-Goetz, just to name a few...
Preparation

- Cataloging community must
  - study the conceptual model offered by FRBR and FRAD
  - Read and study drafts of RDA as released
  - Provide feedback to JSC
- Vendors must consider re-design of their systems in order to incorporate new functionality of bibliographic and authority data
Our bibliographic universe is not just books, but rather many galaxies and worlds of content packaged in various information carriers.

For example, the content of a visual image can be captured on a carrier like film, or on a YouTube moving image viewable online; another type of content is sound, that can be recorded as notation in printed scores or captured as MP3 files that carry that content to play on an iPod; or we have content that can be constantly changing like that on some Web pages. FRBR describes the bibliographic universe of all of the things that libraries include in our collections or things we want to make known to our users. All types of materials, including the digital.

Slides 12-52 were taken from Barbara Tillett “presentation entitled “FRBR” given on July 10, 2009 at the ALCTS preconference at the 2009 ALA Annual Conference in Chicago. Session materials available at http://presentations.ala.org/index.php?title=Friday%2C_July_10
The FRBR entity-relationship model is a conceptual model, which means it’s a generalized way to look at our bibliographic universe of things that libraries collect or want to make known to our users. FRBR, as a conceptual model, is intended to be independent of any cataloging code or implementation. It’s not a data model, it’s not a metadata scheme, it’s not a system design, but rather an abstract model of all the things that libraries, museums, and archives collect for our users.

Conceptual models can be very useful as the foundation for development of systems, and we have found it a very useful guide that gives structure to the next generation of cataloguing rules – in particular RDA: Resource Description and Access, which is a new cataloging code now being developed, based on FRBR.

The FRBR Entity-relationship model consists of symbols and words to <click> identify the things in the universe (that we call “entities”) and <click> the characteristics or attributes of those things as well as <click> the relationships among those things.
<table>
<thead>
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<th>Functional Requirements for Bibliographic Records (FRBR)</th>
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<td><strong>User tasks</strong></td>
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<tr>
<td>- Find</td>
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<td>- Identify</td>
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<td>- Select</td>
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<td><strong>Entity-relationship model</strong></td>
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<td>- Entities: Group 1, 2, 3</td>
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<td><strong>National level record elements</strong></td>
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<td>(mandatory &amp; optional data)</td>
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FRBR’s Entity-Relationship Model

- Entities
- Relationships
- Attributes (data elements)

We can diagram the model using <click> boxes for the entities that are <click> connected by arrows to show the relationships <click> with other entities.
For example, we can say one entity, a person named Shakespeare is the creator of the play Hamlet (another entity) – or we can say the relationship goes both directions – Shakespeare created Hamlet and also the other way, Hamlet was created by Shakespeare. Actually in our model we’d move this to a more abstract level to say a person created a work and a work was created by a person – the entities are person and work and the relationship between them is the created/created by relationship. We use the model to help design systems so any individual can be plugged into the model.

So we have entities and relationships. The FRBR entities are sorted into 3 groups for the convenience of talking about them.
FRBR Entities

**Group 1:** Products of intellectual & artistic endeavor = bibliographic resources
- **Work**
- **Expression**
- **Manifestation**
- **Item**

Group 1 entities are the products of intellectual and artistic endeavor - the content and the packages that contain that content – all of the bibliographic resources that we want to make available to our users – the things we collect in libraries. The model <CLICK> calls these work, expression, manifestation, and item.

(click to next slide)

**Work**, according to FRBR, is a distinct intellectual or artistic creation. It is an abstract entity. I like to think of it as the **ideas** that a person has in their head.

A work is realized through one or more **expressions** in the form of some notation, like alpha-numeric notation, musical notation, choreographic notation, or it can be sound, an image, an object, movement, etc., or any combination of these things. An expression can be a performance or a translation or a version of a particular work. It’s useful to identify works and expressions because we can use the names of works and expressions as a device to organize displays of information – I’ll show you more in a minute.
Once we capture a particular expression of a work in some container or we record that content on some carrier, we have a manifestation of a particular expression of a work. When we record the intellectual or artistic content, we move from the abstract “work/expression” to some physical entity. As FRBR puts it, a manifestation is the physical embodiment of an expression of a work. In order to record something you have to put it on or in some container or carrier. So, manifestations appear in various “carriers,” such as books, periodicals, maps, sound recordings, films, CD-ROMs, DVDs, multimedia games, Web pages, and so on. A manifestation represents all the physical objects that have the same characteristics of intellectual content and physical form. In actuality, a manifestation is itself an abstract entity, but describes and represents physical entities, that is all the items that have the same content and carrier. When we create a bibliographic record, it typically represents a manifestation – that is, it can serve to represent any copy of that manifestation held in any library anywhere. One example or copy of a manifestation is called an item. Usually it is a single object, but sometimes it consists of more than one physical object, e.g., a book issued in 2 separately bound volumes – the 2 volumes represent 1 item; or a sound recording on 3 separate CD’s. With an item entity, we are able to identify an individual copy of a manifestation and to describe its unique characteristics - that may be information relevant for circulation - checking a particular copy out to borrow it from the library or for tracking its preservation.
The vocabulary is really very important. Let me give you an analogy from Patrick LeBoeuf, who was formerly the chair of the IFLA FRBR Review Group. Our English language, like most languages, can be very fuzzy.

• When we say ‘book,’ what we have in mind may be a distinct, physical object that consists of paper and a binding and can sometimes serve to prop open a door or hold up a table leg – FRBR calls this an item.

• When we say ‘book’ we also may mean “publication” as when we go to a bookstore to ask for a book identified by an ISBN – the particular copy does not usually matter to us, provided it has the content we want in a form we want and no pages are missing – FRBR calls this manifestation.
*When we say ‘book’ as in “who translated that book?” – we may have a specific text in mind in a specific language or a translation – FRBR calls this expression.

*When we say ‘book’ as in “who wrote that book?” - we could also mean a higher level of abstraction, the conceptual (intellectual or artistic) content that underlies all of the linguistic versions, the basic story being told in the book, the ideas in a person’s head for a book – FRBR calls this work.

We want our language to be more precise to help future catalogers and future systems designers speak the same language.
The relationships inherent among the Group 1 entities are shown here –
A work is realized through and expression – that’s a relationship.
An expression is embodied in a manifestation – that’s a relationship.
A manifestation is exemplified by an item – that’s a relationship.
These entities in this set of relationships are all present when we hold an item in our hand (like this copy of Shakespeare’s “Hamlet” – it is an item - one copy of a manifestation – this book - that embodies, captures, or records an expression – in the English language - of a work (Hamlet) that was created by Shakespeare. This is a bibliographic resource and it embodies the English language expression of the work, Hamlet.
I’m now holding another item in my hand that is a DVD (a manifestation) of one movie version of Hamlet (work). Is that making sense?
Let’s now look at the attributes of identifying elements for these entities.
There are essential characteristics or elements that we associate with each of the entities in FRBR. FRBR calls them attributes. RDA calls them elements.

For a work, the main elements are its title, a date it was created if we know it, possibly its identifier (if it has one, e.g., for rights management), etc. For an expression -- which remember can be things like a translation or version or a performance -- we have characteristics like the type of content – what form it took: like text, sound, image, and so on, or its language or information about a performance – on what date did it happen and so on.

Once we record a performance, or publish a translation, or package that content in any way, we produce a manifestation – an entity that is of interest to a library – something for which we would provide a bibliographic description. And a manifestation often brings some information about itself in the form of a title page or a main screen or a label that includes the characteristics of that manifestation – like who published it, where, and on what date, what are its dimensions and extent.

Then for an item, when we have one particular copy of a manifestation, we have other elements or information that characterizes or identifies that particular item, like its physical location when we shelve it – a call number, information about its owner, or perhaps some information about the color and type of binding on that special copy or a barcode – information we can use for inventory control, so we can know where our materials are – so we can make them available for our users.
Here we see that manifestations can come in many packages – books, CDs, DVDs, videocassettes... and so on – the containers or carriers of the content the hold.
That content is characterized by how it is expressed – here as text or as a moving image.
Alexandre Dumas was the creator of the work, the Three Musketeers – all of these aspects are related and by our making those relationships known we can show our users pathways to get to the information they need.
Let’s look at some examples to see if we can tell which type of entity we have when we have these identifying characteristics – these elements:
For the first example, we have the identifying characteristic of it being a leatherbound autographed copy in the Rare books collections – which entity do we have? **An Item – one particular copy**
2. Digitized…. -** Manifestation – the carrier or package that holds some content
3. ** French translation – Expression – language in which expressed and 4.** London symphony  -** Expression – the symphony performs some work, like a concerto and it is expressed through the performance and could be recorded on a CD – a manifestation of that performance **
5. Not your high school textbook – but the ideas in Shakespeare’s head - ** Work
Work, expression, manifestation, item
That’s the Group 1 entities – what about their relationships?
This picture shows a continuum of the relationships within a family of works as represented in manifestations <click> moving from left to right following this red arrow. On the left <click> are those that are equivalent content, that are from the same expression of the same work. Once we introduce a change to the content, like a translation, <click> we have a new expression of the same work - and as we make further changes to the content we move further to the right, farther away from the original work. These are derivative expressions of the same work. Once that derivation crosses the <click> “magic line” of becoming more of the work of another person or corporate body, we consider it a new work, but it is part of the family of related works, even when the content moves on to be only describing <click> a work in the family at the right end of this continuum. Works in a descriptive relationship can also be said to be in a subject relationships, because the subject of those works is another work – as with a commentary on a work.

The ability to inform the user of these related works ties back to the **collocating and finding functions of a catalog. We need to show users the pathways to related materials. The FRBR model reminds us of these important relationships that we should reflect in our catalogs and resource discovery systems for our users.
So, there are inherent relationships among the Group 1 entities, like saying “a work is realized through an expression or “an expression is embodied in a manifestation”.

Another set of relationships are the content relationships among works and expressions, like we saw in the family of works – equivalent and derivative and descriptive relationships. FRBR also describes whole-part relationships where the content of the related things are different, but they are a whole and its parts like aggregates and their components; or there are part-to-part relationships where we have different content that is connected sequentially, like the issues of a serial, or an accompanying relationship where we have parts connected by being supplementary or dependent or the main work in a set of works packaged together.

When we make these relationships known, systems can use them to offer pathways to lead users to related resources that they may find of interest. FRBR brings such relationships to the forefront.
FRBR Entities

Group 1: **Bibliographic resources**
- **Work**
- **Expression**
- **Manifestation**
- **Item**

So those are the group 1 entities that make up our bibliographic resources in our libraries, archives, and museums.

The ideas or works
The way those ideas are expressed or performed as expressions

The recorded or captured expressions that we call manifestations,
And the individual examples or copies that we call items

– we’ll see in a moment why these are helpful to specifically identify. But remember I said there are 3 groups of entities in the FRBR model.
FRBR’s Group 2 entities are the people or sometimes called the “parties” that are responsible for the intellectual or artistic content, or the physical production, manufacture, and dissemination of manifestations, or the custodianship of bibliographic resources.

These are <click>person and corporate body. IFLA added <click>“Family” from the new conceptual model called FRAD – Functional Requirements for Authority Data. This was added in particular for the needs of the archival community.
The relationships for the Group 2 entities reflect the roles played by these persons/families/corporate bodies with respect to the bibliographic resources – for example:  

- a work is created by a person, family, or corporate body – so we get the names of creators of works
- an expression is realized by a person, family, or corporate body – so we have the names of translators or of the people or organizations responsible for producing a movie or an orchestra or other performer as they express a work
- a manifestation is produced by a person, family, or corporate body – for example the names of publishers
- an item is owned by a person, family, or corporate body – like the Library of Congress being the owner of all the items in our collections.
In FRBR we saw major advantages in declaring persons, families, and corporate bodies as separate entities that would be related to other entities. We have traditionally thought of controlling the names for persons and corporate bodies through authority records. By declaring persons, families, and corporate bodies as entities we have much more flexibility in the controlled naming and we can eliminate redundancies that would occur if we made them elements to just describe an entity. In an application of FRBR using the MARC format, as most of our library systems do today, we could make a single authority record for a person or corporate body and link it to other authority records or to bibliographic records or holdings records as needed, depending on the relationship we wished to identify.
Within the authority record or package of information about a person, we would include all the variant forms of name used by that person and all the various ways the names can be presented – different forms of the name, different spellings in different languages in different scripts – bringing all the variant forms together as the characteristics of that entity to help identify it.
We now move on to the 3rd group of entities that can be the subject of works – all the things that are in a subject relationship to a work.
Group 3: Subjects of works

- Groups 1 & 2 plus
- Concept
- Object
- Event
- Place

- Subject relationship

Group 3 includes any of the Group 1 or Group 2 entities, plus concept, object, event, and place.

*Concepts* include the topics, or subject headings, or classification numbers that we use to describe what works are about.

*Objects* are material things, like buildings, ships, pieces of sculpture, or found objects.

*Events* are things that happen, like the Battle of Hastings, or a conference, or an exhibition.

A *place* is a location, like Houston, Texas, Washington, D.C., or Mount Rushmore, or the Pacific Ocean, or the moon.
A work can be about many things, so this subject relationship, as shown on this slide, relates a work to all of the other entities – because a work can be about another bibliographic resource, like a documentary movie about the Gutenberg Bible or a work can be about a person – like a biography – or about a corporate body – like the history of an organization. But a work can also be about a concept, or about some object, or event, about a place. We may also at some point add the entity for time to this model (which is under consideration by the FRSAR Wkg. Grp). So those are the entities and relationships in the FRBR entity-relationship model, and some of the elements or attributes that characterize each of those entities. We’ve covered what FRBR is in terms of its conceptual model, let’s now move on to why we need it. I’ve already mentioned some reasons: like it reminds us of the importance of being able to group related things together and it gives us a clear way of identifying those things and describing them with specific elements that can then be re-used or packaged to best suit the needs for displaying information to users.
By clearly identifying the entities and showing relationships among them, we can improve the users’ experience as they look for information. Cataloging rules based on FRBR will identify the works and expressions in our resources and enable us to better gather together our resources in our search systems. When applied to future cataloging systems, it will make it easier to link related works, and to link new manifestations to existing works and expressions that we have in our collections and to save time and effort for example by re-using the subject analysis done once for a work as we get new manifestations to link to that work in our collections. FRBR also positions us to operate better in the Internet environment by clearly identifying the elements and relationships necessary for navigating our bibliographic universe and making those elements available on the Web for much more versatile displays that fit the users’ interests.
**Applications of the Conceptual Model**

- **FRBR is conceptual model**
  - No application is prescribed

- **Opportunities for the future in new systems designs**
  - Australia, Europe
  - Variations3, etc.

- **Keep user foremost in mind**

FRBR gives us a conceptual model – how we apply it is up to us, and we need to be practical about it. <click> Thinking more conceptually gives us an opportunity to imagine how to improve service to the end users as we think of designs for future systems and future structures for communicating bibliographic information. FRBR has been widely applied in Australia and in Europe and was the underlying model for the Research Libraries Group experiment RedLightGreen and is being applied in Indiana University’s Variations3 project for a music catalog. It is also used in OCLC’s WorldCat. FRBR is fundamental to the thinking about cataloguing rules and principles and is reaching worldwide acceptance, and I believe one of the key reasons is <click> that it keeps the user foremost in mind.
VTLS was the first vendor of integrated library systems to embrace FRBR and to test their vision of how to implement FRBR. In their presentations they explain their views of the benefits of applying FRBR to their system:

They find that with FRBR, the principle of collocation is expressed in a much better way because we have a better and more easily understood organization to the catalog. It’s more intuitive to group or collocate the translations and editions and performances (i.e., expressions) and the various manifestations of those expressions under the work that is contained in those manifestations. FRBR gives us more ways to display information by identifying elements and pathways. <click>

Cataloging is easier with FRBR because the system can take advantage of the FRBR structure to automate the inheritance of identifying information – metadata from the highest levels (works and expressions) of linked descriptions – for example the subject headings and classification numbers given to a work can be inherited by the linked manifestations. FRBR Work and Expression records need only to be cataloged once. Right now, under traditional cataloging, catalogers have to repeat the Work and Expression elements every time they catalog a new edition of a work – in each bibliographic record.
In 1876 Charles Ammi Cutter published the first edition of his cataloging rules and identified several objectives for a library catalog, including finding and collocating. These were later reinforced by Seymour Lubetzky in his Principles of cataloging in the 1960’s and became the foundation of the 1961 Paris Principles that are the underlying principles behind nearly every cataloging code used in the world today.

We assume the library has a target group of users with particular needs and that the catalog of the library should enable users to find what they need. This finding objective is accomplished through standards for description and access in our rules. The catalog should also collocate the works of an author, and that requires the use of controlled vocabularies and leads to greater precision of searching. A catalog may also collocate bibliographic records for entities on a particular topic – subject access. The FRBR entities are very useful to meet the collocation or gathering objective, but it takes a new perspective on these objectives, looking at “user tasks.”
In the *Functional Requirements for Bibliographic Records*, “user tasks” are the things we feel a user wants to do relative to the bibliographic universe:

- **Find** an entity or entities in a database using attributes or relationships - Elaine Svenonius has suggested this should actually be in two parts - to locate and to collocate entities. The user does this by searching the catalog
- **Identify** - to confirm that the entity found corresponds to the entity sought
- **Select** - to choose an entity meeting the user requirements for content, physical format, etc.
- **Obtain** - to acquire an entity or to access an item (even online) and we could add a task to *relate* - that is relate the materials a user finds to others that may be in the collection. FRBR describes the particular elements or attributes and shows how each contributes to achieving each task.

We may find this conceptual model enables us to meet the objectives of a catalog in new ways.
The recently approved IFLA Statement of International Cataloguing Principles reaffirmed the Paris Principles objectives for a catalogue and rewrote them in FRBR terminology where the traditional finding and collocating functions include:

Finding, that is,

4.1. to find bibliographic resources in a collection as the result of a search using attributes or relationships of the resources:

4.1.1. to find a single resource

4.1.2. to find sets of resources representing

   all resources belonging to the same work
   all resources embodying the same expression
   all resources exemplifying the same manifestation
   all resources associated with a given person, family, or corporate body
   all resources on a given subject
   all resources defined by other criteria (language, place of publication, publication date, content type, carrier type, etc.), usually as a secondary limiting of a search result.

FRBR was seen as a way to reaffirm the traditional objectives.
We hope future systems will be developed to take full advantage of mining the metadata that catalogers provide and have been providing. When we are cataloging with FRBR-based rules, it should be easier to fulfill the objectives of a catalog to display all the works associated with a person, all the expressions of the same work, all the manifestations of the same expression, and all the items and their special characteristics, plus...
all related works <click> to movies or plays based on Hamlet – all of this to guide a user through our rich collections and beyond – we also can make connections to related information on the Internet, <click> like the Wikipedia article about Hamlet or any other related resource out on the Web.

This was not possible with book or card catalogs. There is an amazing network of related information and in the past we’ve only been able to deliver to our users a small view.

But once we are able to share this linked data on the Internet, we can offer resource discovery systems that will show pathways to all sorts of related resources.
Here’s another possible way we could use FRBR to display information: collocating works.

As we’ve suggested before, we could group displays first by persons, and then their works of the family of works, and then all the expressions of those works and finally manifestations – when that was relevant. For example, here we would pull in the preferred titles for the works written by William Shakespeare.

A user could then click on the work they wanted – on the plus sign to see the expressions.
We may find it helpful to collocate by other groupings of the based on the same stories and the ways it has been expressed over time – in different types of content – texts, motion pictures, sound recordings, and so on when there are many expressions we can expand the display to show the user the various modes of expression available that all come from the same family of works – like here we see texts and motion pictures and sound recordings for Hamlet and…
Then we could arrange the various available expressions by the language.  Here we see an example showing all the books arranged by language, then all the motion pictures, and all the sound recordings.

A user could then click on the desired expression level icon to see the bibliographic records for the manifestations.

The displays in the VTLS experimentations with FRBR in their Virtua system are similar to this approach.
When we have lots of expressions and manifestations for a work, we could arrange the various expressions by the element most important to the user, like the names of the directors of the motion pictures (which is expression level information. Or we could display the cast and find the one that starred Richard Burton (the 1964 film).

Or we could combine that information with elements from the related manifestations, such as the date of publication (as shown here), or place of publication, publisher, or carrier – grouping together the films on reels, or on videocassettes, or DVDs, or digitized copies, and so on. The user should be able to choose how they would like to see the results arranged. This amounts to re-packaging the metadata in ways best suited to the user’s needs.

A user could then click on that expression level icon to see the bibliographic records for the manifestations and items available to them at that library closest to where they are in the world. This connection to the closest library is similar to what WorldCat does with Google and the “Find it in a library” link.
Here we have an OPAC record from our Library of Congress Voyager integrated library system. If we take a look at the display for Shakespeare’s Hamlet, you will see that our OPAC display also includes all of the FRBR Group 1 entities – in a sense it is already “FRBR-ized.”

When we browse under Shakespeare in the online catalog, we should group the various expressions we have of that work. Some systems do this collocation or gathering together of the works and expressions better than others now.

With the Anglo-American Cataloguing Rules, we provided a uniform title that included the…
name of the “person” in the role as the creator of the work, plus a preferred title for the work, plus
expression-level information to indicate that this particular description is for a French translation of Hamlet. The OPAC display also shows us the specific
manifestation in terms of the body of the bibliographic description – things like the place of publication, the publisher, the date of publication, the extent- how many pages, its size, and so on

and also the individual
Items that we hold in our collections – with location information and a call number.

One advantage of using the FRBR model is to help clarify concepts that have been rather muddy in our rules in the past. Using the FRBR language in cataloging rules and identifying the specific elements or attributes of each entity should make concepts clearer especially for the next generation of catalogers and system designers.

Once we clearly label all the elements and relationships, our future systems can re-use that information to provide displays and pathways that are the most relevant to our users.

FRBR lets us describe the things in this universe with a new vocabulary that also helps us talk to designers of systems, so we can work together to build better resource discovery systems for the future - especially to build systems that take full advantage of the technology we now have with Internet linking capabilities. The technologies of the past that produced our book catalogs, card catalogs, and then the early online catalogs each had an impact on how we were able to convey information to our users.
This slide came from “RDA and OCLC” a webinar held in October 30, 2009. Go to http://www.oclc.org/rda/about.htm for more information. There will be another webinar on November 19, 2009.

A posting on the blog Celeripedean also has a link to the actual powerpoints used, from which this slide was taken.
RDA data stored in a database mirroring the MARC 21 structure

- Bibliographic record
- Holdings record (linked to bibliographic record)
- Authority records (linked to access point fields in bibliographic record)

This slide came from Tom Delsey’s presentation entitled “FRBR and FRAD as Implemented in RDA” given on July 10, 2009 at an ALCTS preconference at the 2009 ALA Annual in Chicago. Preconference materials can be accessed at http://presentations.ala.org/index.php?title=Friday%2C_July_10
### MARC 21 Changes

*slide from “RDA and OCLC”, Webinar presentation, October 2009. K. Calhoun, J. Godby, T. Fons, and G. Patton*

- Bibliographic records
- 040 $e$ code ‘rda’ to identify the rules used
- New fields for content type, media type and carrier type
  - Field 336 – Content type
  - Field 337 – Media type
  - Field 338 – Carrier type
- Authority records
- 040 $e$ code ‘rda’ to identify the rules used
- Other fields for entity attributes
- OCLC implementation in time for use in the testing

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Another slide taken from the RDA and OCLC webinar—see slide 53.
Content, media, and carrier types

• Content type
  ○ MARC Leader/06 - must continue to use
    ○ Less granular than RDA
    ○ MARC LDR/06 code examples
      • e - cartographic material
      • f - manuscript cartographic material
  ○ New field 336 - use if want to record exact RDA terms
    $a$ Content type terms
    $2$ Source
    ○ RDA term examples
      • cartographic dataset
      • cartographic image
      • cartographic moving image
      • cartographic tactile image
      • cartographic tactile three-dimensional form
      • cartographic three-dimensional form
    ○ 336 ## $a$ cartographic dataset $2$ rda
      (McCallum, S., 2009)

This and the following two slides were taken from Sally McCallum’s presentation entitled “RDA in MARC” (slides 12-14) at the ALCTS session “Look Before You Leap: taking RDA for a test drive” held on July 11 at the 2009 ALA Annual Conference. Go to http://presentations.ala.org/index.php?title=Saturday%2C_July_11 to access materials from that presentation.
Content, media, and carrier types

- Media type
  - MARC 007/00 – close match with RDA
    - 007 provides coding for multiple facets of resource
      - MARC 007/00 code examples
        - h - microform
        - s - sound recording
  - New field 337 - use if want to record exact RDA terms and/or do not need to code additional facets of resource
    - $a Media type term
    - $2 Source
      - RDA term examples
        - microform
        - audio
    - 337 ## $a microform $2 rda
    - 337 ## $a audio $2 rda

(McCullum, K., 2009)
V. The Economics of Cataloging

The practice of cataloging has never before faced the level of scrutiny it now enjoys … or endures. Two types of question predominate. First, are traditional cataloging and the MARC record—even after modernization by RDA and FRBR—still necessary in an era of full-text indexing, OpenURL linking, and other discovery options? While this is a worthy question, it is fortunately not within the purview of this report. As described below, it is clear from the survey results that MARC records remain a basic requirement of library—and therefore vendor—operations. While it is vital to attend to the evolution of discovery options and non-MARC metadata, our working assumption is that the MARC cataloging record will remain important for the next five to ten years. (p.33)
Next Steps

- It’s over to the vendors!
- Testing—Spring 2010 (LC) NEISD, San Antonio, TX, is representing school libraries
- LIS educators are participating as a one testing group
- Test results will be reported at ALA Annual 2010
- Results incorporated into RDA
Questions?

THANK YOU.

SOME RESOURCES
HTTP://WWW.RDAONLINE.ORG
HTTP://WWW.RDA-JSC.ORG