

Quick-Start Guide to Required LAR Metadata Elements

1. Not required but recommended: <recordID>
 - This element is a place for you to put an id number to keep track of your lar records. It is usually the same number as the corresponding record in your cataloging system. It is basically free-text. You can only include it once in each record.
2. required: <recordDate>
 - This is the date that the record was created/when you cataloged the resource.
 - You can only include it once in each record.
 - It needs to be in one of these formats: "YYYY-MM-DD", "YYYY-MM", or "YYYY"
3. required: <identifier>
 - This is the URL location of the resource you've cataloged.
 - You can only include it once in each record.
 - It needs to start with http:// or it won't be valid.
4. required: <title>
 - This is the title of the resource. It is free-text.
 - You can only include it once in each record.
5. required: <subject>
 - You can include as many different subjects as apply to the resource.
 - The content must be one of the terms in the controlled vocabulary:
 - "Agriculture"
 - "Anthropology"
 - "Atmospheric science"
 - "Biological science"
 - "Chemistry"
 - "Computer science"
 - "Earth system science"
 - "Ecology"
 - "Economics"
 - "Education"
 - "Engineering"
 - "Environmental science"
 - "General science"
 - "Geography"
 - "Geoscience"
 - "Health/Medicine"
 - "History of science"
 - "Materials science"
 - "Mathematics"
 - "Natural history"
 - "Oceanography"
 - "Physics"
 - "Physical science"
 - "Psychology"
 - "Science and society"
 - "Space science"
 - "Technology"
6. Not required but highly recommended: <keyword>
 - A keyword is a free-text term you would use to categorize the resource. It helps users to find applicable resources in a search at nsdl.org.
 - You can include as many keywords as you like.
 - Examples might include "Materials engineering", "Newton", "Air pollution", etc.
7. required: <language>
 - Language indicates which languages the resource is available.
 - You can include as many languages as apply.
 - You must choose a term from the controlled vocabulary below (language names in parentheses are not part of the vocab, they're just to provide clarity):
 - "en" (English)
 - "en-US" (English (American))
 - "en-AU" (English (Australia))
 - "en-GB" (English (United Kingdom))
 - "ar" (Arabic)
 - "ca" (Catalan)
 - "zh" (Chinese)
 - "hr" (Croatian)
 - "cs" (Czech)
 - "da" (Danish)
 - "nl" (Dutch)
 - "et" (Estonian)
 - "fi" (Finnish)
 - "fr" (French)
 - "de" (German)
 - "he" (Hebrew)
 - "hu" (Hungarian)
 - "is" (Icelandic)
 - "id" (Indonesian)
 - "it" (Italian)
 - "ja" (Japanese)
 - "ko" (Korean)
 - "ml" (Malayalam)
 - "no" (Norwegian)

"pl" (Polish)
"pt" (Portuguese)
"ro" (Romanian)
"ru" (Russian)
"sr" (Serbian)
"sk" (Slovak)
"es" (Spanish)
"sv" (Swedish)
"th" (Thai)
"tr" (Turkish)

8. required: <format>

- Describes the internet medium of the resource, like whether it's a program, a pdf file, a video, etc.
- You can include as many format types as you like.
- Must be a term from the controlled vocabulary:

"application/exe"
"application/java"
"application/maple"
"application/mathcad"
"application/mathematica"
"application/matlab"
"application/ms-excel"
"application/ms-powerpoint"
"application/ms-word"
"application/ogg"
"application/pdf"
"application/postscript"
"application/x-java-applet"
"application/x-java-jnlp-file"
"application/x-rar-compressed"
"application/x-shockwave-flash"
"application/zip"
"audio"
"audio/basic"
"audio/mpeg"
"audio/quicktime"
"audio/x-aiff"
"audio/x-midi"
"audio/mp3"
"audio/x-pn-realaudio"
"audio/x-wav"
"image"
"image/gif"
"image/jpeg"
"image/png"
"image/tiff"
"model"
"model/vrml"
"text"
"text/html"
"text/plain"
"text/richtext"
"text/xml"
"video"
"video/avi"
"video/mp4"
"video/mpeg"
"video/quicktime"
"video/realvideo"
"video/shockwave"
"video/x-flv"
"video/x-ms-wmv"

9. required: <educationLevel>

- Education level refers to the intended audience of the individual resource, whether it's for kindergartners or grad students.
- You can include as many different education levels as apply.
- You must choose a term from the controlled vocabulary:

"Pre-Kindergarten"
"Elementary School"
"Early Elementary"
"Kindergarten"
"Grade 1"
"Grade 2"
"Upper Elementary"
"Grade 3"
"Grade 4"
"Grade 5"
"Middle School"
"Grade 6"
"Grade 7"
"Grade 8"

"High School"
 "Grade 9"
 "Grade 10"
 "Grade 11"
 "Grade 12"
 "Higher Education"
 "Undergraduate (Lower Division)"
 "Grade 13"
 "Grade 14"
 "Undergraduate (Upper Division)"
 "Grade 15"
 "Grade 16"
 "Technical Education (Lower Division)"
 "Technical Education (Upper Division)"
 "Graduate/Professional"
 "Informal Education"
 "Elementary School Programming"
 "Middle School Programming"
 "High School Programming"
 "General Public"
 "Youth Public"
 "Vocational/Professional Development Education"

10. required: <audienceRefinement>

- This element explains whether the resource is directed specifically at teachers (like a lesson plan) or students (like a game), or both.
- You can only include it once in each record.
- You must choose a term from the controlled vocabulary:
 - "Educator"
 - "Educator and learner"
 - "Learner"

11. required: <type>

- Type indicates what sort of type of resource you're cataloging.
- You can include as many different types as apply.
- You must choose a term from the controlled vocabulary:

"Assessment Material"
 "Assessment Item"
 "Answer Key"
 "Rubric"
 "Test"
 "Instructional Material"
 "Activity"
 "Animation/Movie"
 "Article"
 "Case Study"
 "Code"
 "Course"
 "Curriculum"
 "Data"
 "Demonstration"
 "Documentary"
 "Experiment/Lab Activity"
 "Field Trip"
 "Game"
 "Graph"
 "Illustration"
 "Image/Image Set"
 "Instructor Guide/Manual"
 "Informative Text"
 "Interactive Simulation"
 "Lecture/Presentation"
 "Lesson/Lesson Plan"
 "Map"
 "Model"
 "Music"
 "Numerical/Computer Model"
 "Photograph"
 "Problem Set"
 "Professional Development"
 "Project"
 "Simulation"
 "Sound"
 "Specimen"
 "Student Guide"
 "Textbook"
 "Tool/Software"
 "Tutorial"
 "Unit"
 "Voice Recording"

13. required: <date>

- The date that the resource was created, published, or modified

-It needs to be in one of these formats: "YYYY-MM-DD", "YYYY-MM", or "YYYY"

-Needs to include a "type" attribute, which has the controlled vocabulary:

"Created"
"Published"
"Modified"

-You can have more than one date, like if you include both a "Created" date and a "Modified" date.

14. required: <contributor>

-The individual(s) or organization(s) that has created, published or contributed to the resource

-Needs to include a "role" attribute, which has the controlled vocabulary:

"Collection Developer"
"Creator"
"Editor"
"Funder"
"Publisher"

-You can have as many contributors as you like, but each needs to have one and only "role" attribute

15. required: <accessRestrictions>

-Information about a user's access to a resource in regards to conditions or regulations imposed by the rights owner

-You can choose as many as apply.

-You must choose a term from the controlled vocabulary:

"Free access"
"Free access with user action"
"Limited free access"
"Available for purchase"
"Available by subscription"

16. required: <license>

-You can only include it once in each record.

-The license element's content are its two required child elements, below.

-Child element <name> has a suggested vocabulary, but if none of them applies to you, use free-text to enter another. You can only use it once.

"Owner license"
"Public domain"
"Unknown"
"Attribution required:Creative commons:Attribution (by)"
"Attribution required:Creative commons:Attribution share alike (by-sa)"
"Attribution required:Creative commons:Attribution no derivatives (by-nd)"
"Attribution required:Creative commons:Attribution non-commercial (by-nc)"
"Attribution required:Creative commons:Attribution non-commercial no derivatives (by-nc-nd)"
"Attribution required:Creative commons:Attribution non-commercial share alike (by-nc-sa)"

-Child element <property> has a controlled vocabulary, choose as many as apply:

"Public domain"
"Attribution required"
"Non-commercial use only"
"Share alike required"
"No derivatives allowed"
"Educational use only"
"No redistribution allowed"
"No download allowed"
"Other restrictions"
"Terms of use unknown"