Dublin Core (DC) Metadata: A Techno-Savvy Approach of Traditional Cataloguing

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Abstract

The purpose of this paper is to describe about the Dublin Core Metadata elements, its significance, as the latest emerging International Standard of cataloguing of books, articles, videos and World Wide Web Resources. A candid discussion and general guideline is provided for the digital library professionals to manage electronic resources with the help of 16 DC metadata elements. This paper at least answers some primarily questions like "What are DC metadata elements?" "What are its characteristics?" "Why they are important and how it is becoming a techno-savvy approach of traditional cataloguing in current scenario?" The paper also examines the relationship between metadata and traditional cataloguing. The main steps for cataloging web resources using Sixteen Dublin Core Metadata elements are explained, and a worksheet is also provided to create DC metadata. DC metadata elements are valuable add-ons for digital library. The overview of Dublin core metadata cannot be complete in such small paper, therefore author limit herself to the most prominent technologies available. However, following the pointers given readers can easily find more information. The paper is of particular value for newcomers in this area.

Keywords: Dublin Core, Cataloging, Resource Description, Metadata

1. Introduction

The Dublin core metadata initiative began in 1995 with a little fanfare, but today it is widely recognized as International Standard. The continuous explosion of electronic media, internet and the www has brought a revolutionary change in the method of cataloguing and managing the information electronic resources.

The term metadata simply means data about data that aids in the identification description and location of networked electronic resources including long term preservation. Some of the most popular metadata schemas include: Dublin Core, AACR2 (Anglo-American Cataloging Rules) – a standard set of rules for cataloging library materials, GILS (Government Information Locator Service), EAD (Encoded Archives Description) – a metadata scheme for collection finding aids, IMS (IMS Global Learning Consortium), AGLS (Australian Government Locator Service). Out of these DC metadata schema is very easy to create due to its simplicity, usability and flexibility. The elements of Dublin Core are easily identifiable and are clear enough to be understood by even non-catalogers, if proper awareness programs and training are provided.

The metadata also improves resource discovery. Metadata sets are also being developed for administrative control, security, personal information, management information, content rating, rights management, preservation.

Due to its simplicity the Dublin core Metadata is becoming very popular outside the library community amongst researchers, museum curators, and music collectors because it does not require knowledge of highly specialized descriptive systems like AACR2. DC Metadata is synonymous of cataloguing. The only difference is that cataloguing is for physical objects and metadata is exclusively for electronic resources. Metadata is structured information that describes, explains, locates or otherwise makes it easier to retrieve, use or manage an information resource.

2. Methodology

This is a conceptual study based on participant observation. The research for this paper is based on interpersonal and intrapersonal communication with the Library Professionals, Metadata Analyst, and Metadata Librarian, at various academic libraries. Important journals, periodicals, publications and research volumes, online journals internet and project reports are explored thoroughly to build up the first hand information for further analysis. The objective of this study is to define the new way of cataloguing, the Dublin core metadata. A new insight is given to library professionals to adopt better polices to create DC metadata on web. Several pointers to further literature and web sites complete the overview.

3. Metadata Definition

After exploring many definitions, Jane Greenberg's definition is found to be the most appropriate. He defines metadata as "Structured data about an object that supports functions associated with the designated object" [1].

Structured data implies a systematic ordering of data according to a metadata schema specification.

The object is any entity, form, or mode for which contextual data can be recorded. The universe of objects to which metadata can be applied is radically diverse and seemingly endless, ranging from corporeal and digital information resources, such as a monograph, newspaper, or photographs, to activities, events, persons, places, structures, transactions, relationships, execution directions, and programmatic applications.

Functions associated with the designated object emphasis here is on the ability of metadata to support the activities and behaviors of an object. For example, "author", "title", and "subject" metadata facilitate the discovery of an information resource. In this example, metadata promotes specified functions surrounding the life of the designated object – the information resource.

Michael Day (1997) [2] in the British electronic journal Ariadne, points out the connection between today's metadata and the traditional library bibliographic record. When the library and information community discuss metadata, the most common analogy given is the library catalogue record. Priscilla Caplan [3] has defined metadata as a neutral term for cataloguing without the 'excess baggage' of the Anglo-American Cataloguing Rules or the MARC formats. The most well-known

metadata initiative, the Dublin Core Metadata Element Set, has the specific aim of supporting resource discovery in a network environment.

4. What Is Dublin Core Metadata?

The Dublin Core metadata element set is a standard for cross-domain information resource description. It provides a simple and standardised set of conventions for describing things online in ways that make them easier to find. Today Dublin Core is widely used to describe digital materials such as video, sound, image, text, and composite media like web pages. Implementations of Dublin Core typically make use of XML and are Resource Description Framework based [4].

The main objective of Dublin Core is to define a simple set of data elements so that authors and publishers of Internet documents could create their own metadata records with out extensive training. The Dublin Core approach is to have the level of bibliographic control midway between the detailed approaches of MARC and 'structured' TEI (Text Encoding Initiative), and the automatic indexing of locator services such as Lycos [5].

Library catalogue follows Anglo-American Cataloging Rules, second edition revised AACR2R (2003) to describe resources in a standard way, these descriptions are encoded in the Machine Readable Cataloging (MARC) format. Bibliographic utilities like OCLC and RLIN are first checked before the library cataloger creates a bibliographic record for the resource. If the bibliographic description already exists, the record is modified or adapted and exported into the Online Public Access Catalogue (OPAC) of the library. Some libraries, rather than using OCLC and an integrated library automation system to hold their OPAC, may use proprietary database using SQL or other technologies. DC emerged as a simpler alternate to MARC to describe electronic resources and is now used widely to describe all types of resources, including books. [6]

DC stands for Dublin Core, a standard from the National Information Standards Organization (NISO) and the International Organization for Standardization (ISO). Initially, there were 15 DC elements such as Title, Creator, Subject, Description, Publisher, Contributor, Date, Type, Format, Identifier, Source, Language, Relation, Coverage and Rights; but afterwards it extended to one more element, Audience.

DC standard has two levels in creating metadata. When 15 DC elements are used in metadata creation, the level is called Simple, this can be considered equivalent to minimal level cataloging. When the 16 DC element Audience, refinements to the original 15, such as qualifiers and encoding schemes (for example, the vocabulary term and name of the vocabulary from which it is derived), are used, the level of DC use is called Qualified, think of this as full level cataloguing. This article provides directions for use of a level of DC that is Qualified and yet very simple and straightforward to practice.

Simple DC does not help in the goal of information discovery and not all born-digital resources, i.e., electronic resources, have a print equivalent or share the characteristics of books, serials, videos, computer files, and other information resources traditionally organized in the library, and thus require more complex descriptions than simple.

5. Why Dublin Core Metadata?

The Dublin Core metadata schema is easy to create due to following advantages

- 5.1 Due to its usability, flexibility and simplicity, non-cataloguers used them freely. It is expected that authors or Web-site maintainers unschooled in the cataloguing arts will be able to use the Dublin Core for resource description making their collection more visible to search engines and retrieval systems. DC includes sufficient flexibility to encode the additional structure and more elaborate semantics appropriate to such applications.
- 5.2 All elements are repeatable means if there is more than one person who created the resource and the Creator element can be used as many times as is needed to record the names of multiple creators. Similarly, all other elements (title, subjects, etc) may be repeated as many times as needed.
- 5.3 All elements are optional, but allow each site to define which elements are mandatory and which are optional.
- 5.4 It is not intended to supplant other resource descriptions, but rather to complement them. It is intended to describe the essential features of electronic documents that support resource discovery. Other important metadata such as accounting and archival data, were deliberately excluded to keep the schema as simple and useable as possible.
- 5.5 Due to syntax independence its use in the widest ranges of applications.
- 5.6 The elements of Dublin Core are easily identifiable by having the work in hand, such as intellectual content and physical format.
- 5.7 Due to its clear designing of semantics of these elements a wide range of untrained users can understand easily.
- The elements may be modified in limited and well-defined ways through the use of specific qualifiers, such as the name of the thesaurus used in the subject element. Refinement qualifiers may be vocabulary terms from registered lists such as standard library tools like the Library of Congress Subject Headings and Dewey Decimal Classification, these two may be used to the subject element. There are other vocabularies that may be used. The name of vocabulary used is the encoding scheme qualifier.
- 5.9 It can be extended to meet the demands of more specialized communities. From the very

beginning, the Dublin Core creators recognized that some resources could not be adequately described by a small set of elements. The Dublin Core creators came up with two solutions, number one, by allowing the addition of elements for site-specific purposes or specialized fields. Number two, by designing the Dublin Core schema so that it could be mapped into more complex and tightly controlled systems, such as MARC.

6. How to Create DC Metadata

It is very pathetic to observe the paradoxical attitude of some of the library professionals and information specialists who continue to believe that cataloging web resources is a waste of time, it is better to make web pages (essentially webliographies or lists) because many of the web resources are too ephemeral to be included in the library catalog.

To make the maintenance of metadata for web resources much simpler, new tools such as URL link checkers are used. The users are suggested to start with the library catalogue as a single gateway to the universe of knowledge. The usage of DC refinements and principles advocated in this article is both integrative and time saving. It will save the time of the library cataloger and the user because it recognized the lessons learned by the library, archival and museum cataloging communities and tries to incorporate them into DC metadata creation.

Cataloging is synonymous for the activity of metadata description. Resource descriptions are synonymous for DC records. Instead of 999 tags in library MARK, 16 elements of Dublin core have been used. The best of cataloguing practice, however, be captured in the following simple guidelines. Required information should be filled normally, failing which an element becomes meaningless.

6.1 Guidelines to Create DC Metadata

There are three main guidelines to create DC metadata as discussed below-

- 6.1.1 **Guidelines 1:** A comprehensive Resource description is required. The data should be absolutely complete to avoid confusing meaning of the element. For example, if there is no title, make up a title. Leave the element blank only as a last resort.
- 6.1.2 Guideline 2: Consistent resource description should be provided taking into consideration the inconsistent nature of humans beings, the principles of consistency is used in cataloging and classification to avoid cognitive overload. There are many techniques for ensuring consistency and the simplest is to use words from a predetermined and authoritative list whenever possible for controlled values.
- 6.1.3 **Guideline 3:** All of the DC elements is optional, repeatable, and modified by qualifiers. All 16 elements are described in detail and each element includes the following

categories of instruction and information. Main categories of Instruction for creating DC Metadata are shown in Figure 1.

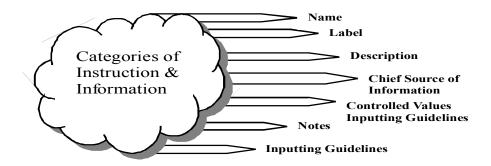


Figure 1: Categories of Instruction for Creating DC Metadata

6.2 Main Categories for Creating DC Metadata

The Main Categories for creating DC Metadata are Name, Label, Description, Chief Source of Information, Controlled Values Inputting Guidelines, Notes, and Inputting Guidelines.

- 6.2.1 **Name:** Name is the name given to the element in DC standard.
- 6.2.2 **Label:** Label as seen in an integrated library system or a bibliographic utility such as OCLC for entering this information. Somewhere elements name is same as the Label and sometimes it may be different
- 6.2.3 **Description:** Description is the definition given in the DC standard Comments also come for the DC as appropriate.
- 6.2.4 Chief Source of Information: Instruction modeled after the technical reading of the item for cataloguing practices, AACR2 is the chief source of information. The process of technical reading provides specific guidance to the sources of information the exact places in the resources from which the metadata for each element may be selected.
- 6.2.5 Controlled Values Inputting Guidelines: Controlled values is also modeled after AACR2R and MARC to some extent and allows the metadata creator to know if the element uses a list of controlled values, a classification, or controlled vocabulary. These values may be made

- enforceable by the software or humanly selected from a given list or through consultation of an external list/source such as registers. Controlled vales help make meaning clearer and consistent. They do so by keeping the form of element vales, the metadata content for each element describing the resource, the same across multiple resources. Precision, increased relevance of result retrieved in response to a query, is improved in subject information retrieval by the use of controlled vales and vocabularies.
- 6.2.6 Notes: Metadata Creator Notes or creation guidelines discuss how much of the cataloguer's (metadata creator) judgment is involved in creating the metadata for each element. Metadata creation is often subjective rather than objective. Without clear rules and standards, two different catalogers may describe the same resource quite differently. The term subjective is used to indicate that a particular element can be described based on the personal judgment of the resource cataloger and objective is used on the personal judgment of the resource cataloger and objective is used to denote objectivity, when the data or content is found on the resource or may be identified in a similar manner by all resource metadata creators and catalogers.
- 6.2.7 **Inputting Guidelines**: Inputting guidelines provide special directions that must be followed to enter the resource description. These illustrate the general principles of DC metadata creation.

6.3 Elements-by-Elements Description of DC Metadata

Description and how to create DC metadata (Notes) and inputting guidelines with examples for electronic (web) information resources for all DC elements are discussed below. A DC Metadata Creation Form with a sample resource description is shown in Appendix 1, where Resource is a 'Dublin Core (DC) Metadata: a Techno-Savvy Approach of Traditional Cataloguing' described as text.

6.3.1 Element: Title

- 6.3.1.1Description: A name given to the resource.
- 6.3.1.2Inputting Guidelines: Enter the title information as found in the resource. Use capitalization and punctuation as found in resource.
- 6.3.1.3DC Creator Notes: Generally, there should be no individual judgment involved as the metadata creator is merely transcribing the title, when the resource has a clearly presented title. Many electronic resources, however, may not have a title clearly visible or the title may be generic for the whole and not the specific part being catalogued. In these cases, creating the metadata for the title, where the cataloger must create or supply title, can become subjective. Follow the guidance prescribed in the Chief source of information and generally take title from the actual information resource whenever possible. Example: Title= "The Art of Music"

6.3.2 Element: Creator

- 6.3.2.1 Description: An entity primarily responsible for making the content of the resource.
- 6.3.2.2 Inputting Guidelines: Enter the Creator as found in the resource. Use capitalization and punctuation as found in resource. If Creator is an organization, enter the name of the organization.
- 6.3.2.3 Metadata Creator Notes: Objective. Cataloging the creator becomes a subjective activity should the creator not be listed in the resource, while it is possible through extra research to find out this information, generally this would take too much time and hence, most cataloguing is only done based on actual examination of the resource. If creator can not be readily determined from this, leave this element blank. Many electronic resources do not have the creator easily identifiable. Example Creator= "Mishra, Rajeshver"

6.3.3 Element: Subject

- 6.3.3.1 Description: The topic of the content of the resource.
- 6.3.3.1 Inputting Guidelines: Input subject from LCSH or from resource as Keywords.
- 6.3.3.1 Metadata Creator Notes: Objective when the terms are found on the resource.
 Subjective, if cataloger supplied. Most often will be cataloger supplied. Example:

6.3.4 Element: Description

Subject="Library Automation"

- 6.3.4.1 Description: An account of the content of the resource.
- 6.3.4.2 Inputting Guidelines: Provide abstract, table of contents, or description of the resource.
- 6.3.4.3 Metadata Creator Notes: Objective if taken from resource. The information in this element may be subjective if it is a summary provided by the cataloger. Example Description="The article defines metadata, examines the relationship between creating metadata and cataloguing, provides definitions for key metadata vocabulary terms and explores the topic of metadata generation. Cataloguing is for physical objects and metadata is exclusively for electronic resources"

6.3.5 Element: Publisher

- 6.3.5.1 Description: An entity responsible for making the resource available in its present form such as Publishing House, a University Department, or Corporate entity.
- 6.3.5.2 Inputting Guidelines: Enter the Publisher as found in the resource. Use capitalization and punctuation as found in resource. If Publisher is an organization, enter the name of organization.

6.3.5.3 Metadata Creator Notes: Objective, may become subjective. It is often difficult to find the name of the publisher for electronic resources. For example, consider the homepage. Who is the publisher? We generally consider the organization or individual who is hosting the web page to be the publisher. Thus the publisher of this author's home page is the University of Kanpur. Example Publisher="Kanpur University"

6.3.6 Element: Contributor

- 6.3.6.1 Description: An entity responsible for making contributions to the content of the resource.
- 6.3.6.2 Inputting Guidelines: Enter the Contributor as found in the resource. Use capitalization and punctuation as found in resource. Contributors play different roles and can be indicated by using parenthesis, following the name. Thus, some roles are Editor, Translator, and Illustrator. Example Contributor= "Anand, Anoop (Editor)"
- 6.3.6.3 Metadata Creator Notes: Objective. There are a great many more roles that Contributors can fall into. But, to keep the activity of metadata creation simple and save time, the above three are sufficient.

6.3.7 Element: Date

- 6.3.7.1 Description: A date associated with an event in the life cycle of the resource.
- 6.3.7.2 Inputting Guidelines: Follow the YYYY-MM-DD format and choose from list what type of date is being recorded, whether the date is the date the resource was created or modified. If no date is available, leave blank, if multiple dates are found, enter the most recent only and indicate type. Enter 00-00 for month and date when it is not found on the resource easily.
- 6.3.7.3 Metadata Creator Notes: Objective. Keep cataloguing simple and only specify one or two dates, when found, based on your local user needs. Example Date= "2007-07-27"

6.3.8 Element: Type

- 6.3.8.1 Description: The nature or genre of the content of the resource.
- 6.3.8.2 Inputting Guidelines: DCMI Metadata terms (2006) [7] TYPE Vocabulary has a list, from which select as many as types. They are Collection, Dataset, Event, Image, InteractiveResource, MovingImage, PhysicalObject, Service, Software, Sound, StillImage and Text that can be found in the resource.
- 6.3.8.3 Metadata Creator Notes: Objective. Example Type= "Image"

6.3.9 Element: Format

6.3.9.1 Description: The physical or digital manifestation of the resource. Typically, format may include the media-type or dimensions of the resource.

- 6.3.9.2 Inputting Guidelines: Select one or more of the formats.
- 6.3.9.3 Metadata Creator Notes: Objective. Example: Format="Image/gif" or Format="2KB"

6.3.10 Element: Identifier

- 6.3.10.1 Description: An unambiguous reference to the resource within a given context.
- 6.3.10.2 Inputting Guidelines: Give full URL starting http://.....
- 6.3.10.3 Metadata Creator Notes: Objective.

6.3.11 Element: Source

- 6.3.11.1 Description: A reference to a resource from which the present resource is derived. Recommended best practice is to reference the resource by means of a formal identification or call number system.
- 6.3.11.2 Inputting Guidelines: Enter the title followed by a comma and the URL. If no title or URL found or the original source is a print or other format, describe in own words. Many electronic resource are born-digital and have no print or other digital counterpart. Hence, source may often be left blank.
- 6.3.11.3 Metadata Creator Notes: Objective. Example: Source="Image from page 34 of the 1922 edition of Romeo and Juliet"

6.3.12 Element: Language

- 6.3.12.1 Description: A language of intellectual contents of the resource.
- 6.3.12.2 Inputting Guidelines: Select the language of the resource.
- 6.3.12.3 Metadata Creator Notes: objective. Note that many learning resources are available in versions other than English, therefore record the language to match the object being catalogued. Do not use the language element to record version information. Example: Language= "en" for English and "fr" for French.

6.3.13 Element: Relation

- 6.3.13.1 Description: A reference to a related resource.
- 6.3.13.2 Inputting Guidelines: Select the appropriate relationship between two or more resources. A resource may have multiple relationships. Add Title and URL.
- 6.3.13.3 Metadata Creator Notes: objective. Example: Title="Electronic AACR2" Relation="Anglo-American Cataloguing Rules, 2nd edition" [relationship described is IsFormatOf]

6.3.14 Element: Coverage

- 6.3.14.1 Description: The extent or scope of the content of resource.
- 6.3.14.2 Inputting Guidelines: Select the appropriate spatial, temporal, jurisdiction coverage of the resource and use the words in the resources.
- 6.3.14.3 Metadata Creator Notes: Objective. For some types of literary materials, this might be subjective.

6.3.15 Element: Rights

- 6.3.15.1 Description: Information about rights held in and over the resource. Typically a Rights element will contain a rights management statement for the resource, or reference a service providing such information. Right information often encompasses Intellectual Property Rights IPR, Copyright, and various Property Rights.
- 6.3.15.1 Inputting Guidelines: may be either a text statement or URL pointing to a right statement, or a combination, when a brief statement and a lengthier one are available.
- 6.3.15.1 Metadata Creator Notes: objective. Example Rights="Access limited to teachers"

6.3.16 Element: Audience

- 6.3.16.1 Description: Intended user for resource.
- 6.3.16.2 Inputting Guidelines: Look for this information on the main resource page, if none is found, browse the resource and select one or more of the values from the Controlled values list Elementary, Middle, High School, Undergraduate level, Graduate Level, Professional, General Education.
- 6.3.16.3 Metadata Creator Notes: Subjective, if not found explicitly stated in resource. Example: Audience="General Education"

7. Future

There has been growing awareness in the library and information community of the importance of metadata, not only for resource discovery but also as an aid in the management of networked digital resources, including long-term preservation.

In future the job titles of cataloger will be replaced with Metadata architect, Metadata librarians or Metalogger. The term Metalogging will be introduced in place of cataloguing in metadata community. But these new terms follow the cataloguing profession to a certain extent, the general consensus is that they are not the same fields of endeavour. DC is not a simplified cataloguing format. As expressed by Gradmann in his IFLA paper 'Cataloguing vs. Metadata: old wine in new bottle'. The concept of metadata is meant to provide machine understandable description It is not just to be read by humans,

but interpreted by computers which will then act on it, for example, to differentiate between good and untrustworthy sites [8].

The continuous increase in production and proliferation of electronic information results in creation of new innovative simpler standards research resource description to accomplish the goal of universal bibliographical control and information access.

Metadata just like currency will continue to make the world go around, because it is the medium of exchange for connecting searchers with the information they need. Metadata will be shared, reused and redistributed in user community because it is very simple and economic and saves time and money.

DC has received widespread acceptance amongst the resource discovery community and has become the defacto Internet Metadata Standard Taylor, Chris (2003) [9]

8. Conclusion

Gone are the days when long hours were spent in creating catalogue cards .In the present technosavvy ambience of the academic world even the cataloguing practices are also influenced. The traditional library catalogue, over the last 100 years, has evolved to fulfill the function like Finding, Identifying, Locating, Selecting, and Collocating. Equating creating metadata and cataloging makes sense because these activities have the same end goal – to produce a set of structured descriptive data that will facilitate object discovery and other desired functions.

The first objective to be fulfilled by the traditional library catalogue is to help the user in finding, identifying and locating materials when the author, title or subject is known. The second objective is to bring similar materials together in collocation and aid in selection.

Dublin core also fulfills the traditional library catalogue system. As Find covers DC elements like Title, Creator (author etc) other Contributors, Subject for primary search categories and for secondary search Language, Coverage, Format. Identify includes Date, Type, Format, Identifier. Select includes Description, Coverage. Obtain In networked environment, obtaining a resource should be fully supported by the inclusion of an accurate address in the Identifier element. Most of the effort in this area has gone towards assuring that the identifiers assigned to electronic resources are – and remain over time – accurate. Both cataloguing data and DC metadata support the four tasks, although DC is only designed to support the finding and obtaining of electronic resources. In the digital library more importance is given to the information discovering function and finding and locating.

Metadata has been and will continue to be an enabling tool for extending the usability of the Web in the areas of resource discovery and access. Resource metadata creation is an ongoing process. Metadata for electronic resources are more similar to serials catalogue records, which require constant maintenance, changes and updates as serials evolve throughout their life. In this paper more emphasis is laid to bring harmonious relationship between cataloguing and metadata creation by outlying some important ways in which DC metadata can be created. In the development of DC metadata standard by the DCMI, initial emphasis has been laid in getting minimal bibliographic control over electronic resources. So we can say Metadata is a fancy name for an inferior form of traditional cataloguing.

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Appen	idix 1: DC Met	adata Creation Form w	ith Sample Resourc	e Descriptions
Title:	Dublin Core (I	DC) Metadata: a Techno-S	avvy Approach of	Traditional Cataloguing
Name	of Metadata	Creator:		
	Creator (First Author) Anjana Bhatnagar			
	Creator (Seco	nd Author)		
	Creator (Third	d Author)		
Date o	of Metadata C	reation2007-10-09		
Subje	ct (LCSH): 1. [Oublin Core 2. Resource D	escription 3	4
Keywo	rds (from the R	esource itself)		
1. Cata	aloging 2	. Metadata 3	4	
Descri	iption (Brief su	ımmary of the resource, u	se quotation marks if	summary is taken directly
from R	esource			
	Abstract: The purpose of this paper is to describe about the Dublin Core Metadata elements			
	its significanceThe paper is of particular value for newcomers in this area.			
	Table of Conte	ents		
Publis	her: I.I.T. Kanp	our		
Contri	i butor (Enter a	dditional contributors, if a	ny, as follows)	
	Editor(s)	Translator(s)		
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Date	(Enter date YYYY-MM-DD Format)			
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	Valid 2008-10	0-09Modifie	d	
	AvailableDate Accepted		ccepted	
	Date SubmittedDate Copyrighted			
Туре	(Select only one category - Form or Genre of the Resource)			
	Collection	Dataset	Event	
	Image	Interactive Resource	Service	
	Software	Sound	*Text	

Format (Select as many as are applicable)

Application/ms-word Application/ms-excel Application/mspublisher

Application/pdf Audio/mpeg E-book
Image/gif Image/jpg Image/png
Multipart/mixed ***Text/html** Text/xml

Text/rft Video/mpeg Video/quicktime

Other

Identifier (URL) http://www.clib.iitk.ac.in .Source Title & URL

or Description Language English.....

Relation (Select from list and add Title and Identifier (URL), when available)

IsVersionOfHadPartHasVersionIsReferencedByIsReplacedByReferencesIsPartOf http://www.iitk.ac.inIsFormatOfHasFormatReplacesIsRequiredByRequires

ConformsTo

Coverage (Use geographical terms to indicate spatial coverage and time periods to indicate

temporal Spatial Spatial

Rights (Select from list below)

*Accessible freely *Copyrighted Copyright unknown
Cost unknown Public domain Restrictions apply

Subscription needed License restrictions apply Copyright and cost restriction unknown

Audience (Select the educational level of the audience for the Resource from list)

Elementary School Middle School High School
Undergraduate level Graduate level *Professional

General education Mediator

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