

Indexing and Abstracting

Lecture 06 -- The Abstracting Processing

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Purpose of Abstracting

- Give scholars filtered access to the literature
- Give the current awareness to the users
- Serve as a retrospective search tool
- Some abstracts can replace actual articles, some cannot
 - Indicative abstracts
 - Informative abstracts
 - Critical abstracts

Coverage

- Referred Journals
- Conference papers

Concerns of Abstracting

- Economic constraints
 - Cost, time
- Significant material
 - Notes, communications, and letters have minimal significance
- Publication Source
 - Respected publishers
 - New or unknown sources may be temporarily ignored
- Subject interest of the users

Sample Abstract

- [Sample 1](#)
- [Sample 2](#)
- [Sample 3](#)

Steps in Abstracting

- Step 1: Recording bibliographic data
- Step 2: Analyzing content
- Step 3: Writing annotation
- Step 4: Identifying abstractor
- Step 5: Compiling abstracts

Steps in Abstracting – Step 1

- Completeness and accuracy of Reference
- Reference section goes at the head of the abstract
- The elements to be included are standardized, but presentation may be different
- To save space, abbreviation is commonly used for reference
 - Abbreviation should be consistent and follow established rules
 - A list of the abbreviations should be available

The Title

- A good title is a key device in identifying information
- Properly handle title rather than copying it
 - Original title: controlling eating
 - Abstractor's title: [The use of hypnosis in the] controlling [of compulsive] eating
 - Original title: Eureka! (發現了!)
 - abstractor's title: Eureka [the discovery of a calorieless beer]!
- Translated titles



Good Title

- Descriptive
- Clear
- Brief
- Stating exact topic



Author

- Some convention for presentation of author(s)
 - Last name first
 - Chen, Kuang-hua
 - Add additional authors in the normal order
 - Chen, Kuang-hua, Hsin-Hsi Chen, and John Smith
 - It is best not to use initials



Author Affiliation

- An author's organization is often of interest to a user
 - Make judgment
 - Contact with authors
- Example
 - Disraeli, Homer (Disraeli Delicatessen, Muleshoe, TX)
 - Chen, Kuang-hua (Department of Library and Information Science, National Taiwan University)
- Sometimes, Author affiliation will be ignored or could not be known



Funding Agency

- If the document is a technical report or a paper based on the results of funded research, the funding agency should be noted in the reference section
- The authors should acknowledge the funding agency
- Include agency name and the grant or contract number

Publication Source

- Key unit of the reference due to its location function
- Follow some standard conventions
- MLA, APA, Chicago Style, etc.
- Common style
 - JournalTitle VolNo IssueNo PageNo Year
 - *J Amer Soc Inf Science* 30(5) 290-295 (1979).

Monographs and Books

- Title
- Author
- Publisher and Place of publication
- Date
- Pages
- Price

- *Think Green*. Thumb, Tom, Jr. and Homer Disraeli (ABCD Press, Muleshoe, TX) 1989, 250pp. \$30.50.

Patents

- Title
- Inventor
- Organization
- Issuing country
- Patent number
- Issue date

- “A Sausage-stuffing Computer.” Disraeli, Homer (Disraeli Delicatessen), U.S. 0000000000, 1 April 2001.

Foreign Language

- Indicate the original language
- If it has been translated, the translation source information should be supplied



Other Information

- Form
 - E.g., available only in microfiche
- Price
- ...



Steps in Abstracting – Step 2

- Content analysis
- Abstracting is the process of expressing the ideas of other people in one's own words
 - Who will use the abstracts you create
 - What will the users search for



Sample

Smith carried out the experiment on Tuesday because Monday was a holiday and on Wednesday he had a dentist appointment. Right after lunch he mixed four grams of the Red Stuff with eight grams of the Purple Stuff, put it to boil, and set the timer for exactly four minutes. While the mixture was cooking, he called the dentist's office to confirm the time of his appointment. At exactly the time that the timer rang, the mixture exploded and destroyed the lab. Smith concluded that four minutes is too long to cook the mixture.



Points of Sample Abstract

- Include
 - Use four grams of the Red Stuff
 - Use eight grams of the purple Stuff
 - Cook the mixture exactly four minutes
 - Mixture explosion resulted
 - Conclusion: Do not cook the mixture for four minutes
- Ignore
 - The day and the time he did the experiment
 - The dental appointment

Indicators for Content Analysis

- Objectives and scope
- Methodology
 - NEW methods
 - Statistical techniques
- Results
 - Validity, reliability, accuracy
- Conclusions
 - What hypotheses were accepted or rejected?
 - What evaluations?
 - What applications or suggestions?
 - Implications related to objectives?
- Other information

Steps in Abstracting – Step 3

- Write the annotation
- Construct a short narrative
 - Outline is useful for construction of abstract
- The length of abstract depends on
 - Length of the document
 - Nature of the topic
 - The facts discussed
 - The technical details
- Less than 250 words
- Less than 100 for communication notes
- Beyond 500 words, the abstract will become review

Steps in Abstracting – Step 3

(Continued)

- The first sentence of an abstract is critical – topical sentence
- Topical sentence should be concise and informative
- The first sentence should not repeat the information conveyed by title
- The abstract should be complete
- The abstract should reflect the full meaning and purpose of the paper
- Readers should know what the document is about solely from reading the abstract

Steps in Abstracting – Step 3

(Continued)

- The structure of the abstract should be unified and logically developed.
- Trilogy
 - A beginning
 - A middle
 - An end
- Two common mistakes
 - Follow the structure of original documents
 - Use the words of documents directly



Brevity

- Use “The conclusion is ...”
 - Rather than “The results of the study lead one to the conclusion that ...”
- Use “Resulting data were ...”
 - Rather than “After the experiment was completed the following data were compiled”
- Brevity but not ambiguity



Steps in Abstracting – Step 4

- Identification of abstractor
 - For credit
 - For responsibility
- Initials used commonly with the full name in the preface of publication
- Full names are also used frequently



Steps in Abstracting – Step 5

- Arrangement of the abstracts
- Common form is alphabetical by title
- By author
- By subject descriptor
- Classified
- All of above will be supported by indexes



Editing Abstracts

- Check reference section
- Check the standardization of terminology
- Conform the rules
- Correct the grammars
- Slash the redundancies
- Spell out the ambiguous abbreviations
- Eliminate ephemeral subjects
- Improve clumsy diction



Evaluation of Abstracts

- Correct citations
- Factual description
- Omission of critical points
- Poor diction and grammar
- Redundant phrases
- Obscure writing
- Conformity to abstracting policy and rules
- Promptness in the publication
- Availability of the abstracts
- The cost
- The quality of supportive indexes
- Authoritativeness of the abstracts
- Brevity
- Satisfaction of users



Example: Biological Abstracts

57744. KHASA, P., V. FURLAN and J. A. FORTIN. (Res. Station, Agric. Canada, Sainte-Foy, Quebec G1V 2J3, Can.) TROP AGRIC 69(3):279-283. 1992. Response of some tropical plant species to endomycorrhizal fungi under field conditions. –Nineteen agricultural and silvicultural plant species cultivated in Zaire were tested under field conditions for their response to endomycorrhizal fungi. All plant species, except amaranth, showed various degrees of root colonization in non-fumigated and fumigated soil. Eight plant species (African yam bean, wild mung, acacia, leucaena, onion, sweet potato tomato and cassava) were highly dependent on mycorrhizae for normal growth and development. The added endomycorrhizal inoculum significantly increased root fungal colonization in 16 of the 19 plant species cultivated. (Smith, J.)