Web of Science Core Collection:
Journal Evaluation Process and Selection Criteria
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Background
We remain true to our heritage, but adapt to change.
Guided by the legacy of Dr Eugene Garfield

Adapted to respond to technological advances and changes in the publishing landscape

The basic principles of our selection process remain the same: objectivity, selectivity and collection dynamics

Our robust evaluation and curation make the *Web of Science Core Collection* the most authoritative global citation database
How it all started back in 1955...

Citation Indexes for Science
A New Dimension in Documentation through Association of Ideas

Eugene Garfield

“The uncritical citation of disaposited data by a writer, whether it be deliberate or not, is a serious matter. Of course, knowingly propagandizing unsubstantiated claims is particularly abhorrent, but just as many naive students may beowered by unfounded assertions promulgated by a writer who is unaware of the criticisms. Published in scholarly journals, critical notes are increasingly likely to be overlooked with the passage of time, while the student in which they appeared, having been reported more widely, are apt to be disregarded.”

In this paper I present a bibliographic system for science literature that can eliminate the uncritical citation of fraudulent, incomplete, or obsolete data by making it possible for the conscientious scholar to be aware of criticisms of earlier papers. It is no too much to expect a research worker to spend an insufficient amount of time searching for the bibliographic documentation of nonexistent papers. It would not be excessive to demand that the thorough scholar check all papers that have cited or criticized such papers, if they could be located quickly. The citation index makes this check practicable. Even if there were no other use for a citation index than that of eliminating the citation of poor data, the index would be well worth the effort required to compile it.

This paper considers the possible utility of a citation index that offers a new approach to subject control of the literature of science. By virtue of its different construction, it tends to bring together material that would never be collated by the usual subject indexing. It is best described as an association-of-ideas index, and it gives the reader as much brevity as he requires. Suggestions through association-of-ideas is offered by conventional subject indexes but only within the limits of a particular subject heading.

If one considers the book as the mean unit of thought and the periodical article the micro unit of thought, then the citation index is related to certain aspects deals in the individual or molecular unit of thought. It is true that most indexes are inadequate, because the scientist is quite often concerned with a particular idea rather than with a complete concept.”

Thought
can be extremely useful if they are properly conceived and developed.

In the literature-searching process, it detects only a small, although significant, group. There are a wide range of association indexes in the literature of science fall to point out that such indexes, although they may be desirable, will provide only a better starting point than the one provided in the selective indexes at present available. One of the basic difficulties is to build subject indexes that can anticipate the infinite number of possible approaches the scientist may require. Processes of classified indexes may suggest that classification is the solution to this problem, but this is by no means the case. Classified indexes are also dependent upon a subject analysis of individual articles and, at best, offer an inferior consistency of indexing rather than greater specificity or multiplicity in the subject approach. Similarly, terminology is important, but even an ideal standardization of terminology and nomenclature will not solve the problem of subject analysis.

What seems to be needed, then, in addition to better and more comprehensive indexes, alphabetical and classified, are new types of bibliographic tools that can help to span the gap between the subject approach of those who create documents—that is, authors—and the subject approach of the scientist who seeks information.

Since 1972 the legal position has been provided with an invaluable research tool known as Shepard’s Citations, published by Shepard’s Citations, Inc., California, U.S.A. (12). A citation index is published for court cases in the 48 states as well as for cases in Federal courts. Briefly, the Shepard citation system is a listing of individual American court cases, each one listed followed by a complete history, written in a complete code. Under each case is given a record of the publications that have referred to the case, the other court decisions that have affected the case, and any other references that may be of value to the legal lawyer. This type of listing is particularly important to the lawyer, because, in law, much is based on precedent.

Citation indexes depend on a simple system of coding entries, one that requires minimum space and facilitates the gathering together of a great volume of material. However, a code is not absolutely necessary if one chooses to compile a systematic listing of individual cases or reports, with a complete bibliographic history of each of them. Then, it would be possible to list all pertinent references under each case with sufficient conto.

History of Web of Science

1964
• Garfield Introduces the first Science Citation Index
• A five-volume print edition indexing 613 journals and 1.4 million citations

1966
• The Science Citation Index becomes available on magnetic tape

1965
• Dr. Garfield introduces the Journal Impact Factor, a metric to measure the impact of a journal

1975
• Commercial appearance of the Journal Impact Factor on Journal Citation Reports (JCR)

1988
• Science Citation Index becomes available on CR-ROM

1992
• ISI is acquired by Thomson, who later merged with Reuters in 2008 to operate as Thomson Reuters

1997
• Science Citation Index becomes part of a web environment named Web of Science

2001
• Web of Science is incorporated to other databases into a platform named Web of Knowledge

2014
• The Web of Knowledge is redesigned being given its current name Web of Science Core Collection

2016
• Thomson Reuters sold the Intellectual Property and Science (IP&S) business and from this separation merged an independent company, Clarivate Analytics

2017
• Clarivate Analytics acquires Publons, creator of the leading online global peer-review platform

2018
• Clarivate Analytics acquired Kopernio, an A.I. technology business that revolutionises how researchers access articles across the globe
The Web of Science Core Collection
Our process of curation is unique.
➢ Our editorial decisions are conducted by our expert in-house editors

➢ They have no affiliations to publishing houses or research institutes

➢ No potential bias or conflict of interest

➢ Each editor is focused on specific subject categories

➢ Deep nuanced knowledge of the journals in their field

➢ Our rigorous process for the *Web of Science Core Collection* contrasts with that for other databases that rely on algorithmic approaches and/or delegating aspects of editorial decision-making to the research community.
The **Web of Science Core Collection**

At the heart of the **Web of Science** platform
1 Science Citation Index Expanded (SCIE)
   Created as SCI in 1964, now indexing journals showing data from 1900 to present with complete cited references

2 Social Sciences Citation Index (SSCI)
   Created in 1973, now indexing journals showing data from 1900 to present with complete cited references

3 Arts and Humanities Citation Index (AHCI)
   Created in 1978, now indexing journals showing data from 1975 to present with complete cited references

4 Emerging Sources Citation Index (ESCI)
   Created in 2015, now indexing journals showing data from 2005 to present with complete cited references

5 Conference Proceedings Citation Index (CPCI)
   Created in 2008, now indexing proceedings from 1990 to present with complete cited references

6 Book Citation Index (BKCI)
   Created in 2011, now indexing books
The **Web of Science Core Collection**

A trusted, high quality collection of journals, books and conference proceedings

**Journals**
- **SCIE**: clinical, natural and applied sciences
- **SSCI**: social sciences
- **AHCI**: arts & humanities
- **ESCI**: all disciplines

**Books**
- **BKCI**: all disciplines

**Conference Proceedings**
- **CPCI**: all disciplines
We use a single set of 28 criteria to evaluate journals:
- 24 quality criteria designed to select for editorial rigour and best practice at the journal level
- 4 impact criteria designed to select the most influential journals in their respective fields using citation activity as a primary indicator of impact

Journals that meet the quality criteria enter ESCI in the Web of Science Core Collection

Journals that meet the additional impact criteria enter SCIE, SSCI or AHCI depending on their subject area

These are dynamic collections subject to continuous curation to ensure journals are in the appropriate collection

ESCI journals that gain impact move to SCIE, SSCI or AHCI

SCIE, SSCI and AHCI journals that decrease in impact move to ESCI

Any journal that fails to meet all 24 quality criteria will be removed from the Web of Science Core Collection
The **Web of Science Core Collection**

Options to save you valuable search time

**Web of Science Core Collection**

- **SCIE, SSCI, AHCI**
  - journals
- **ESCI** (journals)
- **BKCI** (books)
- **CPCI** (proceedings)

**SCIE, SSCI, AHCI**

Contains the most impactful journals enabling searches to be restricted to the most influential publications

**Web of Science Core Collection**

- Allows search and discovery of a **trusted set** of titles with comprehensive coverage in terms of subject, region, and medium
The Journal Selection Process
**Editorial Workflow**

Improving speed and transparency through an updated journal evaluation process

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**Successful outcomes**

- Starts editorial triage
- Starts editorial evaluation
- Enters ESCI and is evaluated for impact
- Enters SCIE/SSCI/AHCI

**Unsuccessful outcomes**

- Submission cannot be completed
  - Re-submission welcome as soon as issues have been resolved
- Failed editorial triage
  - Re-submission welcome as soon as issues have been resolved
- Failed editorial quality evaluation
  - Re-submission subject to embargo of at least two years
- Failed editorial impact evaluation
  - Entry/continued coverage in ESCI
  - Re-evaluation subject to embargo of two years
Initial triage is performed using information provided by the publisher.

The principal purpose of this triage step is:

➢ To ensure unambiguous identification of the journal submitted for evaluation
➢ To ensure we have full text access to content
➢ To have knowledge of the journal’s peer review policy
➢ To know who to contact if we have any queries or concerns

If the necessary information is not provided, the Web of Science Editors cannot proceed with the evaluation.

There is no embargo period for re-submission if a journal does not pass initial triage.
In this step, the *Web of Science* Editors review the journal to determine whether a full editorial evaluation is merited.

Journal characteristics subject to evaluation include:

- Whether the journal contains a substantial amount of scholarly content
- Whether English language/Roman script requirements are met
- Whether articles are written in a clear, comprehensible way
- Whether journals publish a volume of content that demonstrates interest to the intended research community
- The presence of editorial and author affiliation details to allow their correct identification

There is no embargo period for re-submission if a journal does not pass editorial triage.
In this step, the Web of Science Editors are checking for alignment between the journal’s title, stated scope, the composition of its editorial board and its published content. They are also looking for evidence of editorial rigour and adherence to community standards.

Journal characteristics subject to evaluation include:

➢ Whether the published content is consistent with the journal’s title and stated scope
➢ Whether the size and expertise of the editorial board is appropriate to the volume and breadth of published content
➢ Whether there is evidence of robust peer review
➢ Whether authors demonstrate characteristics that validate their participation in the relevant scholarly community
➢ Whether the surrounding literature is cited appropriately

If a journal does not pass this step, re-submission is subject to an embargo period of at least two years.
The criteria in this step are designed to select for the most impactful journals in a given field of research, using citation activity as a primary indicator of impact.

Citation analysis is conducted at:

- Journal level
- Author level
- Editorial Board level

There is an additional factor that is taken into consideration:

- The content in the journal should be of interest, importance and value to its intended readership and to Web of Science subscribers
- **Content significance** may be evidenced as a unique specialization, a novel perspective, regional focus or unusual content that enriches the breadth of Web of Science coverage. These attributes are not exclusively reflected in journal-level citation activity.

If a journal does not pass this step, re-evaluation is subject to an embargo period of at least two years.
Compared to the Clinical, Natural and Social Sciences, the Arts & Humanities may differ significantly with regard to:

➢ The type of content that is considered to be of scholarly importance
➢ Norms for reviewing content
➢ Citation behaviour

The Web of Science editors give these differences due consideration when reviewing journals in these subjects for ESCI or AHCI.
➢ ESCI is no longer restricted to online journals; print journals can enter ESCI

➢ The restriction on dual-indexing in BIOSIS and ESCI has been removed; Journals that enter our quality criteria can enter ESCI

➢ The restriction on ESCI journals being assigned to a single category has been removed; in common with other *Web of Science Core Collection* indices, ESCI journals can be assigned to up to six categories
There is no separate evaluation process for *Journal Citation Reports* (JCR)

JCR includes journals indexed within SCIE and SSCI

The JCR is updated annually. Journals that are accepted into SCIE and/or SSCI before January 1st and that remain covered in one of these collections when JCR production is started in March, are eligible to appear in the June release of the JCR data.

Citations from all journals, books and conference proceedings indexed within the *Web of Science Core Collection* contribute to the Journal Impact Factor (JIF)

Only journals contained within JCR are awarded a JIF
Evaluation Criteria
Initial Triage (I)

ISSN

The journal must have a registered ISSN that is verifiable on the ISSN database (https://portal.issn.org/) and is clearly and consistently displayed on all journal platforms (electronic and/or print). If both print and electronic ISSNs are present both should be provided.

Journal Title

The journal must have a distinct title that is aligned with the registered ISSN, the journal's stated scope, published content, and community demographic (editorial board and authors). The title should be consistently displayed at the article, issue (if present), journal, and website level.

Journal Publisher

The publisher name must be clearly defined, and a verifiable, physical address (not P.O. Box) for the publisher's business offices must be provided. If there is a society affiliation or ownership, this should be stated, and verifiable contact information must be provided.
Journal URL

Where both online and print editions are available, it is mandatory to provide the journal URL and full-text access details of current content.

Content Access

The Web of Science Group must have full access to the published content with all necessary permissions to view that content. Web of Science Group will provide IP ranges if needed.

Presence of Peer Review Policy

The journal must provide a readily accessible, clear statement of the commitment to peer-review and/or editorial oversight of all published content. Primary research articles must be subject to external peer review.

Contact Details

Contact details for the submitted journal’s primary editorial and production roles must be provided to allow direct communication between Web of Science Group and the journal staff.
Scholarly Content

The journal must contain primarily original scholarly material. The academic level of the research reported should be appropriate to a graduate, post-doctoral, and/or professional research audience. Publications in which the majority of the content is conference proceedings will be preferentially evaluated for the Conference Proceedings Citation Index.

Article Titles and Article Abstracts in English

Regardless of the language of the main body of published content, the journal must provide an accurate, comprehensible English language translation of all article titles. Scholarly articles must have abstracts, and those abstracts must be translated to English.

Bibliographic Information in Roman script

Cited references, names, and affiliations must be published in Roman script to allow rapid, accurate indexing, and easy comprehension by our global users.
Clarity of Language

For titles, abstracts, and all other published text presented in English, the language must be clear and comprehensible to a global audience.

Timeliness and/or Publication Volume

The journal must state whether it has a defined publication frequency, or if it operates under an irregular or continuous publication schedule. The journal must conform to the stated schedule. The volume of scholarly articles published annually is expected to be within ranges appropriate to the subject area.

Website Functionality/Journal Format

Website information must be accurate, the information architecture and navigation system must ensure easy access to the published content and all other features defining the journal (such as Editorial Board, instructions to authors, peer review, access model, and so on). The journal website must clearly link to the publisher website and vice versa.
Presence of Ethics Statements

The journal must be transparent about their ethical requirements for authors and published works. If the journal supports and uses one or more third-party organization's principles (WAME, COPE, Declaration of Helsinki, etc.), either the full text of the guidelines should be presented and appropriately credited to the source, or a functioning link to the full text of the guideline should be provided.

Editorial Affiliation Details

Names and institutional affiliations – including country – of all members of the editorial team are required (such as Editor-in-Chief, Editorial Board Members, Associate Editors, Regional Editors etc.).

Author Affiliation Details

Names and institutional affiliations – including country – and addresses of all contributing authors are required.
Editorial Board Composition

Editor and Editorial Board Member affiliations, geographic diversity, and publication records must be consistent with the stated scope and published content of the journal. The size and composition of the Editorial Board must be consistent with the volume and breadth of publication output. Due consideration will be given to journals that employ full-time professional editors.

Validity of Statements

It is not the intention of our review to ensure the applicability and enforcement of all ethical and plagiarism standards. As required, however, we will undertake investigation of questionable content or false claims.

Peer Review

Articles must show evidence of peer review, beyond the peer-review statement.

Content Relevance

Published content must be consistent with the title and stated scope of the journal.
Grant Support Details

In subject areas where grant support is common or required, appropriate acknowledgement regarding the source of funding is recommended.

Adherence to Community Standards

Editorial policies are consistent with recognized best practices, such as COPE Core Practices, and/or national and international organizations and scholarly societies that advance principles for research integrity within their communities. Articles in the journal are consistent with accepted best practices in their subject area (for example, accepted standards in organism or chemical nomenclature).

Author Distribution

The authors must have affiliations, geographic diversity, and publication records that validate their participation in the scholarly community associated with the stated scope of the journal. The demographic of the contributing authors should be consistent with the topical and geographic characteristics of the Editorial Board.

Appropriate Citations to the Literature

It is expected that articles will appropriately acknowledge the surrounding literature for the topic.
Comparative citation analysis

Our most selective indices (SCIE, SSCI and AHCI) contain the most impactful journals in their discipline. In the comparative citation analysis both the number and the sources of the citations to the journal are taken into consideration.

Author citation analysis

Most authors should have a discernable publication history in the Web of Science. Authors’ citation networks should be appropriate to the category and to journals of comparable scope.
Editorial Board citation analysis

Most Editorial Board Members should have a discernable publication history in the Web of Science. Editorial Board Members’ citation networks should be appropriate to the category and to journals of comparable scope.

Content significance

The content in the journal should be of interest, importance, and value to its intended readership and to Web of Science subscribers. Content significance may be evidenced as a unique specialization, novel perspective, regional focus, unusual content, or content that enriches the breadth of Web of Science coverage. These attributes are not exclusively reflected in journal-level citation activity.
Thank you