Research Area Schemes

Research area schemes, alongside baselines, are important to place bibliometric data into context. A citation count of a paper in isolation is a relatively meaningless number. But by looking at it in the context of peer publications, one can understand the performance, see if it is above or below average and by how much. Through benchmarking, data becomes actionable knowledge.

It is necessary to understand performance within the context of research areas because publication rates and citation behavior can vary considerably from discipline to discipline, document type and over time. For example, mathematics papers are usually cited at a relatively low rate but the citation rate can persist over a long period of time. Whereas molecular biology papers are typically cited more frequently and the citations tail off after a few years as the research is superseded. By understanding the underlying trends and comparing the publications of interest to publications in the same research area, year and document type will have more meaningful results.

Twelve different research area schemes are available in InCites. Three are exclusive to InCites and are described below.

A further eight are based on mapping Clarivate data to external subject classification systems. These schemes are designed to enable the use of bibliometric indicators in the context of a regional research evaluation program, for example the Research Excellence Framework in the United Kingdom. Alternatively, the Organization for Economic Cooperation and Development (OECD) subject classification scheme is a valuable tool for looking at national level bibliometric indicators in the context of demographical and financial data provided by the OECD. Typically, schemes based on external subject classifications are developed in partnership with research evaluation bodies in that region. They may be based on journal classifications or the mapping of Web of Science categories. Please see the Appendix (Regional Subject Schemes) for details of these schemes.

Which scheme to use will depend on the objectives of the analysis. Typically if looking at small sets of publications, such as the output of a single department or individual author, it is advisable to use the higher precision of a narrow subject classification such as the Web of Science scheme. This approach may be useful to overcome differences between things such as applied and theoretical research of the same topic.

However, if you wish to understand the overall subject mix of an organization or a country/region, using a broader scheme may be more appropriate.

Web of Science

The narrowest categorization. The Web of Science scheme is comprised of 252 subject categories in science, social sciences, arts and humanities. The scheme is created by assigning each journal to one or more subject categories. Broad disciplines such as physics are represented as smaller subfields, for example “Physics, Applied” and “Physics, Nuclear.” This narrow definition of subject is an important characteristic of the scheme as citation behavior may significantly vary among subfields. The Web of Science subject scheme is generally considered the best for detailed bibliometric analysis as its granularity enables the user to objectively measure performance against papers that are similar in scope and citation characteristics.

However, because it is often not possible to assign a journal to a single category, there can be overlapping coverage of categories which may complicate an analysis. Each published item will inherit all subject categories assigned to the parent journal.

Coverage of books and conferences follow the same definitions of subject area.

List of categories, scope notes, and journal coverage is available at:

Science Citation Index Expanded

http://mjl.clarivate.com/scope/scope_scie/[1]

Social Science Citation Index

http://mjl.clarivate.com/scope/scope_ssci/[2]

Arts & Humanities Citation Index

http://mjl.clarivate.com/scope/scope_ahci/[3]

Fields

Name	Value
trs_topicType	reference
product	InCites
Indicator	true
draftStatus	false
reviewComplete	false

Essential Science Indicators

Journal Coverage

Article counts for Essential Science Indicators™ are derived from 11,855 journals indexed in Web of Science Core Collection (Science Citation Index Expanded and Social Sciences Citation Index only) over a 10-year period. Citation counts for these articles are derived from journals indexed in Web of Science Core Collection (Science Citation Index Expanded, Social Sciences Citation Index and Arts & Humanities Citation Index)

Each journal is assigned to one of 22 research fields[1]. In ESI, a journal can be assigned to only one field. Journals such as *Science* and *Nature* are categorized as multidisciplinary since they publish research in many different fields. As a result, papers published in these multidisciplinary journals are assigned to a field based on the representation of the cited journals. For example, if the majority of cited references in the paper are to neuroscience journals, the paper is then categorized as neuroscience.

Journal List

The master journal list[1], which comprises all active journal titles eligible for inclusion in Essential Science Indicators™, has been updated as of January 12, 2017, to cover a 10-year plus 10-month period, January 1, 2006 – October 31, 2016. Data is updated bi-monthly (six times a year). This is the fifth bi-monthly period of 2016.

This master journal list will be updated regularly. The current extraction date is December 1, 2016.

1. http://ip-science.thomsonreuters.com/mjl/scope/scope_scie/
2. http://ip-science.thomsonreuters.com/mjl/scope/scope_ssci/
3. http://ip-science.thomsonreuters.com/mjl/scope/scope_ahci/
1. http://help.prod-incites.com/inCites2Live/8300-TRS.html (Essential Science Indicators Journal Category Scope Notes)
1. http://help.prod-incites.com/inCites2Live/8289-TRS.html

Fields

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Indicator	false
draftStatus	false
reviewComplete	false

Fields

Name	Value
product	InCites / Indicators
Indicator	false
draftStatus	false

GIPP Research Areas

A very broad categorization. The GIPP scheme comprises six broad disciplines but covers all fields of scholarly research. The GIPP scheme is based on an aggregation of the Web of Science subject categories and contains significant overlap between disciplines.

The mapping of WoS subject area to GIPP category must be reviewed periodically because WoS subject areas may change from one year to the next. The WoS subject area GREEN & SUSTAINABLE SCIENCE & TECHNOLOGY is new to WoS for 2016, and it has been mapped as follows:

WoS Subject Area	GIPP Classification
GREEN & SUSTAINABLE SCIENCE & TECHNOLOGY	Engineering & Technology
GREEN & SUSTAINABLE SCIENCE & TECHNOLOGY	OVERALL

Mapping of the Web of Science scheme to the GIPP scheme is available in the Appendix (GIPP subject mapping table[1]) .

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Research Area Scheme Selection and Total Results

Each Research Area scheme maps uniquely to the research areas/journals established with the Web of Science Core Collection. For that reason, document totals within the results table will not necessarily correspond to the same total displayed when Web of Science is selected. You can view how categories relate to those in Web of Science Core Collection by viewing the mappings included in each of the Research Area descriptions.

Fields

Name	Value
product	InCites
Indicator	false

Fields

Name	Value
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product	InCites
Indicator	true
draftStatus	false
reviewComplete	false

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Fields

Name	Value
product	InCites
Indicator	false

Fields

Name	Value
trs_topicType	reference
product	InCites
Indicator	true
draftStatus	false

reviewComplete	false