

INFO4990

Information gathering workshop

STEM Library Team
University Library

sydney.edu.au/library



THE UNIVERSITY OF
SYDNEY





*Acknowledgement
of Country*

Today's session will cover:



1

Identifying journals



2

Literature searching



3

Citation impact
and metrics

Assignment 1

- Identify a list of top journals and conferences in your research area and justify your selections
- Identify a list of the main research groups working in your research topic
- Identify 2 exemplary papers in your research area
- Identify research problems that have not been answered or addressed appropriately or at all
- Carry out an introductory literature review



Literature searching



Quick searches

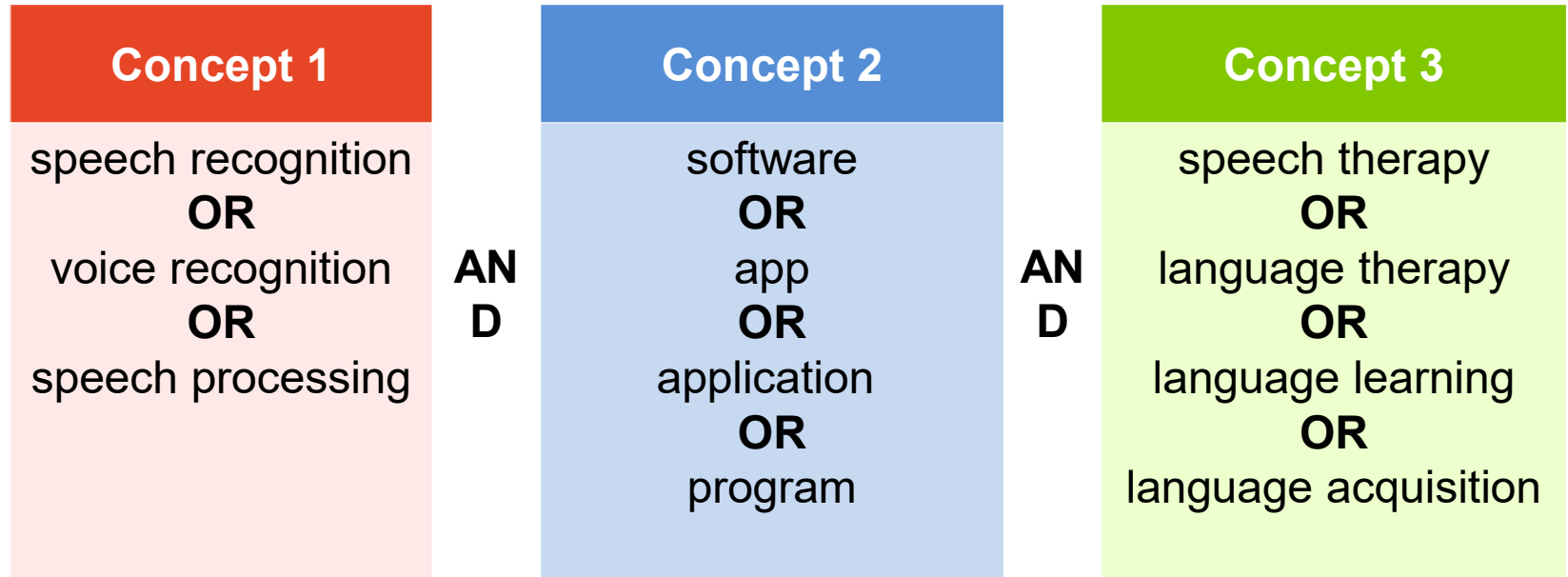
- Will identify key authors, relevant journals, key papers, and key terminology
- Useful for finding immediate answers or a general overview of a topic
- Will not retrieve all relevant sources or cover all aspects of a topic
- Can be used to build a more comprehensive search



Example topic

You are developing a speech recognition app and want to see what applications it might have in speech therapy and language learning. You also want to see what other similar apps currently exist.

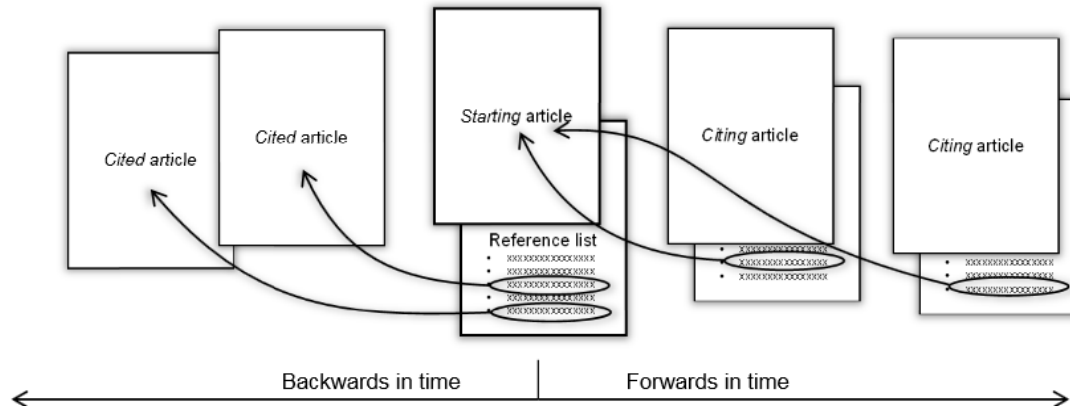
Key concepts and search terms



Demo: Scopus

Citation chaining

- Use a key paper as a 'seed article'
- Look at the articles in this article's reference list
- Look at the articles that have cited your seed article'
- Trace an idea over time



Activity (5-10 minutes)

- Create a concept table
- Use Scopus or IEEE Explore to conduct a quick search
- Note key authors and publication titles
- Add any new terms you find

Synthesis grid (hypothetical example only)

Author/Year	Speech therapy applications	Language learning	Best practice	Technology development
Allen, 2016	✓ Note: key paper on speech therapy applications			✓
Gonzales, 2015		✓	✓ Note: agrees with Lu (2013)	
Lu, 2013	✓ Note: discusses major hurdles for speech therapy applications	✓	✓	
Murray, 2013	✓			✓

Today's session will cover:

1

2

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Identifying journals

Journal and conference rankings



- Scopus Sources
- Journal Citation Reports (via Web of Science)
- ICORE Conference portal
 - Search by 2- or 4-digit FoR code

Demo: Scopus sources, Journal Citation Reports, ICORE



Citation impact
and metrics

What are metrics?

- Publication and citation data used to measure and compare the performance of articles, authors, or journals.
- Vary in complexity
- Come from multiple sources – including Scopus and Web of Science. Metrics from different sources cannot be compared.

Citation Count



$$FWCI \equiv \frac{1}{N} \sum_{i=1}^N \frac{c_i}{e_i}$$

Article metrics



Citation count (Scopus and WoS)

- Raw number of citations received by an article
- Requires comparison for meaning

Field Weighted Citation Impact (Scopus)

- Adjusts for disciplinary differences in citation rates
- FWCI of 1.00 indicates that an article has been cited at the average rate for its field, time period, and publication type
- Scopus

Citation benchmarking percentile (Scopus)

- Shows how citations received by this article compare with the average for similar articles
- e.g. 99th percentile = top 1%

Journal metrics



Journal Impact Factor (Web of Science)

- Annual mean citations received by recent articles

Journal rankings

- Journal Citation Reports (JCR, Web of Science), CiteScore rank (Scopus)
- Adjusts for prestige of citation sources
- Ranked in quartiles (Q1 = top 25%)

Source Normalised Impact per Paper (SNIP, Scopus)

- Accounts for a field's citation potential

CiteScore (Scopus)

- Average citations received per document published in a journal

Demo: Scopus metrics

*Please give us your
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tinyurl.com/yap35h3z

