

Information gathering workshop

Presented by

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A systematic approach

From Assignment 1:

Students need to submit a report that...

4. “Identifies three research problems which have not been answered/addressed appropriately or at all in the field of research study. Students can use the following iterative process to identify research gaps:

Step 1: carry out an introductory literature review,

Step 2: develop research problems into research questions,

Step 3: discuss problems/questions with supervisor(s),

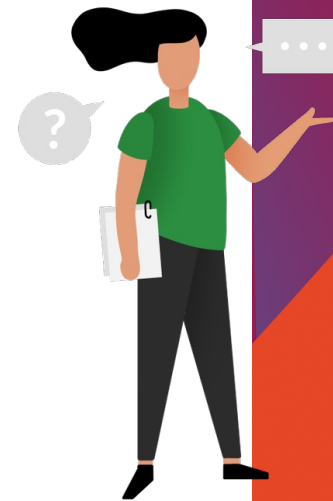
Step 4: refine research problems/questions after discussions with supervisor(s)

”

How would you go about reviewing the literature systematically?

Learning outcomes

- find articles, books and conference proceedings relevant to your topic
- identify relevant journals and evaluate journals for impact
- understand the importance of forming an organised approach to manage research



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Example question

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 apps currently exist.



Formulate an approach you would take to finding information about the example topic.

A

Talk to supervisors
&
Talk to other people that you know
who work in relevant fields

B

Define the scope of the
project & carry out a
literature review

Formulate an approach you would take to finding information about the example topic.

A



Talk to supervisors
&
Talk to other people that you know
who work in relevant fields

B



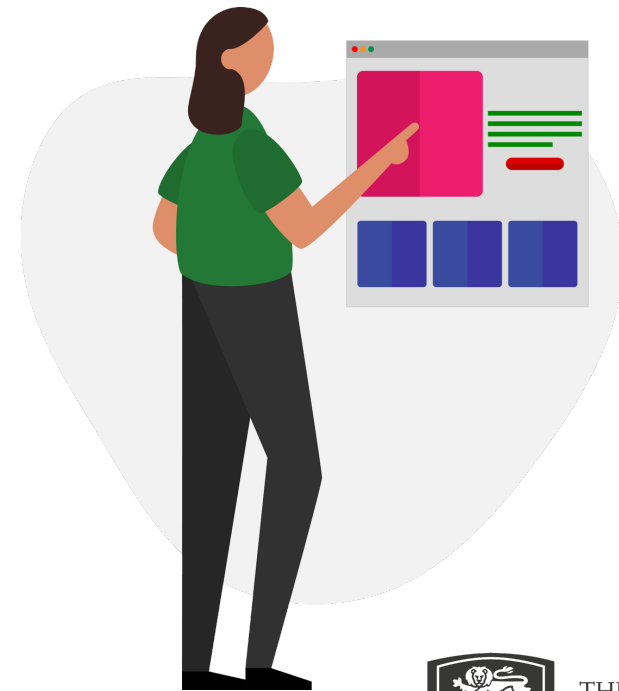
Define the scope of the
project & carry out a
literature review

Scoping search

Identify:

- key authors
- relevant journals in your field
- impactful papers

Keep an eye out for key words, key authors, publication titles and relevant journal articles.



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Key concepts

[illegible]

CONCEPTS (AND)			
SYNONYMS (OR)	CONCEPT 1	CONCEPT 2	CONCEPT 3
	“speech recognition”	software	“speech therapy”
	“voice recognition”	app*	“language therapy”
	"speech processing"	"mobile application"	“speech delay”
			"speech disorder"
			apraxia
			“language learning”
			“language acquisition”

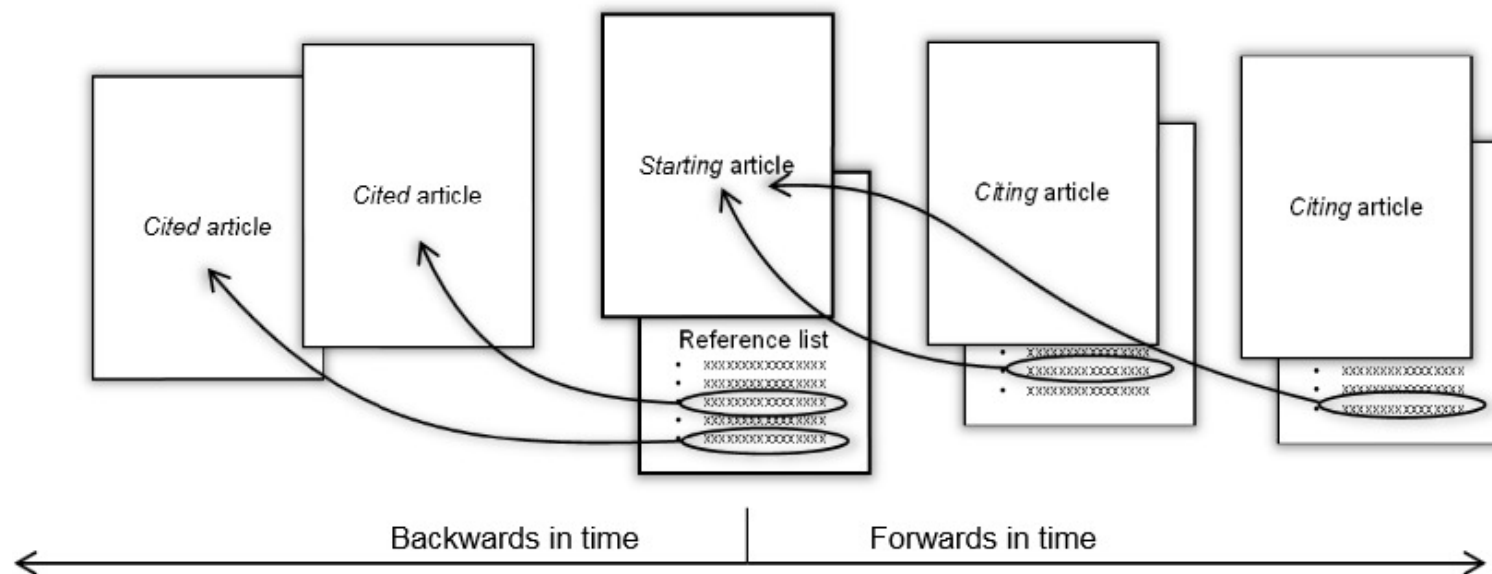
Scopus



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Citation chaining

- Look at the references at the end of an article
- Look at the articles that have cited the article you have found
- Trace an idea – backward and forwards



Activity

Example question from earlier

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

Using your own research area or the example from earlier, use Scopus to do some searching.

Keep an eye out for key words, key authors, publication titles and relevant journal articles.

IEEE Xplore



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So many metrics, which one is the best?

Article - level metrics

- Number of citations
- Field Weighted Citation Impact (FWCI)
- Citation benchmarking percentile

Journal – level metrics

- Journal Citation Reports (from within Web of Science) via the Library site
- [ScimagoJournal & Country Rank](#)
- [CORE](#)



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Synthesis grid (hypothetical example only)

Author/Year	Speech therapy applications	ESL	Best practice	Technology development
Allen, S 2016	✓ Notes: This paper is the key paper on speech therapy applications			✓
Gonzales, R 2015		✓	✓ Notes: This paper disagrees with Lu's (2013) findings	
Kohli, V 2014	✓			
Lu, S 2013	✓ Notes: This paper discusses the major hurdles for speech therapy applications	✓	✓	
Murray, G 2013a				
Murray, G 2013b	✓			✓

Synthesis grid based on template developed by [Dr. Andrea Stern](#)

If you need assistance with...

- Referencing and Endnote
- Publishing your research
- Systematic review
- Locating standards and patents

Contact Library LiveChat



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