

Using Generative AI to Remove Barriers in Support of Open Content Creation

Preface

This document illustrates the input-output flow from a prompt typed into ChatGPT 4.0 (an LLM) to elicit an outline for creating a new open educational resource (OER) about systematic reviews for the field of speech-language pathology.

Prompt

Create an outline for a new open educational resource about doing systematic reviews for the field of speech-language pathology.

Response

Systematic Reviews in Speech-Language Pathology: An Open Educational Resource

1. Introduction

- 1.1. Definition of systematic reviews
- 1.2. Importance in evidence-based practice
- 1.3. Relevance to speech-language pathology

2. Preliminaries

- 2.1. Understanding the research question
- 2.2. Formulating a clear and focused question using PICO (Population, Intervention, Comparison, Outcome)

3. Planning the Review

- 3.1. Assembling a review team
- 3.2. Defining roles and responsibilities
- 3.3. Setting a timeline

4. Literature Search

- 4.1. Identifying relevant databases (e.g., PubMed, CINAHL, ASHA, Cochrane Library)
- 4.2. Developing a search strategy

Example-Outline

- 4.3. Documenting the search process
- 4.4. Managing references using software (e.g., EndNote, Zotero, Mendeley)

5. Study Selection

- 5.1. Establishing inclusion and exclusion criteria
- 5.2. Screening titles and abstracts
- 5.3. Full-text review
- 5.4. Resolving disagreements and discrepancies

6. Data Extraction

- 6.1. Designing a data extraction form
- 6.2. Extracting relevant information (e.g., study design, participants, interventions, outcomes)
- 6.3. Handling missing data

7. Quality Assessment

- 7.1. Tools for assessing study quality (e.g., PEDro, CASP)
- 7.2. Rating the strength of evidence
- 7.3. Addressing potential biases

8. Data Synthesis

- 8.1. Narrative synthesis
- 8.2. Meta-analysis (if applicable)
- 8.3. Interpreting results in the context of clinical practice

9. Reporting and Dissemination

- 9.1. Structuring the report (e.g., PRISMA guidelines)
- 9.2. Writing for different audiences (clinicians, researchers, patients)
- 9.3. Dissemination strategies (e.g., conferences, journals, online platforms)

10. Updating the Review

- 10.1. Importance of keeping reviews current

Example-Outline

- 10.2. Monitoring new research
- 10.3. Deciding when to update

11. Challenges and Solutions

- 11.1. Common challenges in conducting systematic reviews
- 11.2. Strategies to overcome these challenges

12. Case Studies in Speech-Language Pathology

- 12.1. Systematic review on early intervention for children with speech sound disorders
- 12.2. Systematic review on aphasia post-stroke interventions
- 12.3. Systematic review on voice therapy techniques

13. Conclusion

- 13.1. The evolving nature of evidence-based practice
- 13.2. The role of systematic reviews in shaping the future of speech-language pathology

Appendices

- A. Glossary of terms
- B. List of databases relevant to speech-language pathology
- C. Sample data extraction forms
- D. Additional resources and further reading

This outline provides a comprehensive overview of the systematic review process tailored to the field of speech-language pathology. It can be expanded upon with detailed content, examples, and multimedia resources to create a robust open educational resource.

Reference

OpenAI. (2023). *ChatGPT Plus 4.0* (Aug 3 version) [Large language model]. <https://chat.openai.com/chat>