# Developing and refining your literature review

You can use and adapt these prompt questions at different points in the process of researching and writing your review. These are suggestions to get you thinking and writing.

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| 1. **Demonstrating your knowledge and familiarity in your subject/topic:**   What are the significant and established themes of your subject/topic? What are the relevant sources? Why? Are they reliable sources? Why?  **Significant Themes and Established Topics**   * **Distributed Systems in Hybrid Architectures**: The proposed approach combines centralized and distributed elements. Centralized sequence management ensures consistency for unique identifiers across departments, while departmental databases operate independently. Foundational sources like Andrew S. Tanenbaum's *"Distributed Systems: Principles and Paradigms"* and research on hybrid architectures provide insight into such systems. These sources are reliable because they focus on proven models of distributed and hybrid systems. * **Database Design and Implementation**: The system relies on relational databases, with a centralized schema for sequences and independent departmental schemas for modular data. Textbooks like *"Database System Concepts"* by Silberschatz et al., and PostgreSQL documentation on **Foreign Data Wrappers (FDWs)**, are key references for understanding cross-database queries. Their academic credibility ensures reliability. * **Web Interface Design with Modular Access**: User interfaces tailored to roles (student, academic staff, admin) ensure secure and efficient access to data. Standards like W3C's accessibility guidelines and research papers on role-based access control (RBAC) are pertinent. These sources are dependable due to their authority and practical guidance.   What are the recent developments? Are they significant? Why?  **Recent Developments**   * **Hybrid Database Architectures**: Increasing adoption of architectures that combine centralized and distributed principles for improved scalability and data consistency. * **Cross-Database Querying Tools**: Advancements in tools like PostgreSQL's FDWs enable seamless access to distributed data while maintaining localized independence. * **Data Privacy and Governance**: Compliance with privacy regulations like GDPR and CCPA continues to shape how data is managed, especially in hybrid setups.   These developments are significant because they address scalability, compliance, and the challenges of inter-departmental data management.  What are the appropriate methods of research?   Reviewing technical documentation and academic literature on hybrid distributed systems.   Experimenting with PostgreSQL's features like sequences and FDWs.   Analyzing case studies of hybrid systems in educational and other domains. |
| 1. **Your critical analysis:**   What are the strengths of the themes of your chosen topic? What evidence have you found that supports this?  Where are the gaps or weak areas in the literature? What are they?  Are there areas of controversy? What are they? |
| 1. **Summarising your thoughts:**   What do you think? Why do you think that? (Based on the evidence you have gathered.)  How does your project/research question link into this? Why does it need to be undertaken? (Try to give an explicit statement for your reader).  What are the most appropriate research methods to use and why? |
| 1. **Structuring your literature review:**   What are the main themes of your project/dissertation? What order do you need to use to explain this to someone else?  What is the scope of your project/dissertation? (And what is not - important to consider in the planning stages.) |