

STAGE 2 · RESEARCH DEVELOPMENT

Strategic Literature Review Exercise

Research Development Assignment

Objective

This assignment puts the Research Development Guide into practice. You will find relevant researchers, read their current work, summarise it clearly, and think critically about what should be investigated next.

What You Will Do

1. Identify lecturers or researchers in your field who belong to active, well-established research groups.
2. Select 2–3 recent papers each week from researchers whose work genuinely interests you.
3. Read each paper carefully and prepare a concise literature review summary.
4. Before our next meeting, upload the two reviews you believe are your strongest (mentees only).

Step 1 · Identify Researchers and Research Groups

- Choose researchers who are actively publishing and whose research area aligns with your professional or future research interests.
- Do not choose a researcher simply because of the university name. The research topic should genuinely interest you.
- Keep a simple record of each researcher you identify. You may use the table below:

Researcher	University	Research group / lab	Main research interests	Why the work interests me

Step 2 · Select Recent Papers

- Aim for 2–3 recent papers per week.
- Prioritise papers that help you understand what the researcher or group is currently investigating.
- You are not expected to understand every equation or technical detail immediately. Focus first on the research problem, method, findings and unanswered questions.

Step 3 · Prepare a Review

For every paper you read, prepare a short review using the Literature Review Format below.

Maximum length: 2 pages per paper. The limit is intentional. Learn to identify what matters instead of reproducing the whole paper.

Literature Review Format

Use this structure for every paper.

Part 1 Proper Reference

Provide the full reference using a recognised referencing style. Include your name, the date reviewed, the researcher or research group, and the university. This builds the habit of accurate academic referencing.

Part 2 Introduction

Briefly introduce the paper in your own words. Explain what the study is about, the main problem being investigated and why the research was carried out. Do not copy the abstract.

Part 3 Methodology Summary

Summarise how the study was conducted. Include only the information needed to understand how the researchers answered the research question, such as experiments, fieldwork, numerical modelling, analytical methods, materials, datasets or key variables.

Part 4 Key Findings

Summarise the most important results in your own words. Focus on what the researchers actually discovered rather than listing every result.

Part 5 Conclusion

Briefly explain the main contribution of the study. Ask yourself: what do we know after this study that we did not know before?

Part 6 Limitations and Further Work

This is the most important section. Do not simply repeat the limitations stated by the authors (if any). Identify limitations you can justify, explain why each limitation matters, and propose specific further work that could address it.

Guiding Questions for Limitations and Further Work

- What did the researchers not investigate?
- Were important assumptions, variables, materials, locations or conditions excluded?
- Would the findings still apply under different conditions?
- Could another method, larger dataset or additional testing strengthen the study?
- Why does the limitation matter to the reliability, interpretation or wider application of the findings?
- What specific further work could address the limitation? Avoid simply writing “more research is needed.”

Example of stronger critical thinking

“The experiments considered only one initial water content. Because soil behaviour may vary with moisture condition, the wider applicability of the findings is uncertain. Further work could test the material across a broader range of initial water contents.”

What I Will Be Looking For

- **Understanding:** can you explain the research clearly in your own words?
- **Selection:** can you distinguish important information from unnecessary detail?
- **Accuracy:** have you represented the authors’ work correctly?
- **Referencing:** are you developing good academic referencing habits?
- **Critical thinking:** can you identify meaningful limitations and explain why they matter?
- **Research thinking:** can you propose sensible further work that follows logically from the limitation?
- **Communication:** can you write clearly and concisely within the two-page limit?

Submission (Mentees Only)

- Read and review 2–3 papers per week.
- Select the two reviews you believe are your strongest and upload them at damilolaakinniyi.com/mentorship/mentee-submissions/ before our next meeting, using the mentee password I sent you.
- Be prepared to explain how you identified the limitations and why you proposed the further work.

Important: The review must represent your own understanding. You may use AI to help clarify a difficult concept after attempting it yourself, but AI should not write the summary, limitations or further work for you.

Deadline: Upload your two strongest reviews at damilolaakinniyi.com/mentorship/mentee-submissions/ before our next meeting. Keep reading steadily each week; consistency matters more than speed. *Let me know if you have any questions. I’m really looking forward to seeing the research that captures your interest.*