

Using Error Analysis Logs to Improve Your Learning

Do you find yourself repeating the same mistakes in assignments, tests, and exams? Error Analysis Logs are tools that help you overcome repeat errors by developing a strategy for catching and correcting these mistakes *before* you hand in your assignment or your next exam.

What is an Error Analysis Log?

An Error Analysis Log is a personalized document that records feedback you have received about your mistakes and how to correct them. When you receive feedback on projects or exams in your study area, you will create entries in your error log on the error and the correct information.

How can an Error Analysis Log help me?

Most people tend to repeat the same errors. As you add entries to your log, you will likely see patterns emerge. You will be able to identify errors that you most commonly make. Then, as you revise and edit your responses, you can focus correcting these errors. By concentrating on a smaller number of repeated errors, you will reduce the overall number of mistakes as you master the areas that are most challenging to you. Peer tutors can assist in areas that need more work.

Basic Error Analysis by General Types

Type	Remedy Steps	Test or Prep ?
Categorization Issues	Analyzing heading and categories taught and where they apply. Sort questions / situations into categories before answering / solving.	
Key Concepts and Theory	Identify and practise key conceptual information associated with a heading or type of problem or situation.	
Application	Identify the key prior knowledge concepts and the types of problems and situations that they apply to.	
Procedural Steps	Extract the key steps from solved examples and then use / revise steps so you apply them to each type of situation and question.	
Omissions when Reading	Read carefully to ensure that you are answering the right question. There may be several parts to a problem, so go through it thoroughly.	
Time Issues	Start early. Break larger projects and problems into smaller chunks. Have a final draft before the deadline so you have time for review.	
Generally	Identify the patterns of errors you tend to make. This will give you a chance to correct it and prevent them from happening again.	

Adapted from:

McCabe, J. (2011). Metacognitive awareness of learning strategies in undergraduates. *Memory & Cognition*, 39(3).

<https://creatingpositivefutures.com/10-common-mistakes-students-make-when-studying-for-exams/>

<https://www.sbccc.edu/mathematics/mathlab/docs/worksheets/analyzingexamerrors.pdf>

<https://ctl.columbia.edu/resources-and-technology/resources/feedback-for-learning/>

<https://files.eric.ed.gov/fulltext/EJ1105282.pdf>

with special thanks to Richard “Zack” Zajchowski, Camosun College, 2021

Using Error Analysis Logs to Improve Your Learning

How do I use an Error Analysis Log?

1. Identify the Type of error as well as the Topic on a chart (example below).
2. Document feedback given to you on your chart, along with the correct information.
3. When your error log has several entries, group into a type and note if each item happened during **test** or **prep**.
4. Locate the study information that you will use to correct these errors. You can find this in textbook, notes, instructor slide decks, and other items that you can refer to as you study.

Get Started: Error Analysis Log Template

(create this in a spreadsheet or document form with enough room to insert the information)

Type and Topic	Feedback and Remedy	Test or Prep ?

When you use your Error Analysis Log to record and benefit from feedback, your confidence will improve and you are less likely to repeat past mistakes. Good Luck!