

CAREER DEVELOPMENT

Career Decision Matrix

Use weights, evidence, and sensitivity testing to structure a career choice

GRADES 9-12	TIME 2-3 x 42 min	FORMAT Individual + partner	PRODUCT Decision memo
YOUR CHALLENGE Build a weighted decision matrix for four fictional career options, verify every calculation, test how changing priorities affects the ranking, and write a decision memo that acknowledges missing information. A matrix organizes judgment; it does not make the decision for you.			

Learning Goals

- Separate criteria, weights, ratings, and evidence.
- Calculate weighted scores accurately.
- Test sensitivity by changing weights or ratings.
- Recognize threshold requirements and missing information.
- Recommend research priorities rather than claiming certainty.

Case: Samira's Exploration

Samira enjoys problem solving, wants reasonable entry access, values income stability and community impact, and also wants room for creativity. She is comparing four possibilities. The ratings below are provisional and must be verified through research.

Career	Illustrative starting pay	Access rating	Stability	Learning	Community impact	Creativity
Cybersecurity Support Specialist	\$61,500	2	4	5	3	4
Electrician Apprentice	\$47,000	5	5	3	4	3
Community Program Coordinator	\$45,500	4	3	4	5	4
Digital Content Producer	\$52,000	3	2	4	3	5
RATING SCALE 1 = weak evidence that the option meets the criterion; 5 = strong evidence. Ratings are not facts unless supported by a source.						

Part 1 - Evaluate Criteria and Evidence

Criterion	Working definition	Evidence needed before trusting a rating
Entry access	Time, cost, prerequisites, and availability	Verified program/employer requirements and local access
Stability	Continuity of work and demand	Multiple outlook sources; employer/industry context
Learning	Ongoing training and skill growth	Job postings, interviews, advancement pathways
Community impact	Direct or indirect contribution	Daily tasks, clients served, organizational purpose
Creativity	Opportunity for original decisions or products	Work samples, task descriptions, employee examples

Choose one rating in the case table that seems uncertain. Explain what evidence would confirm or change it.

Threshold vs. Preference

A threshold is a requirement that must be met before scoring matters. Example: a role requires a credential Samira cannot currently access. Write two possible thresholds and two preferences for Samira.

Part 2 - Base Weighted Matrix

Use weights: Entry access 4, Stability 4, Learning 3, Community impact 3, Creativity 2. Weighted points = rating x weight. Maximum total = 80.

Career	Access 4x	Stability 4x	Learning 3x	Impact 3x	Creativity 2x	Total / 80	Rank
Cybersecurity Support Specialist							
Electrician Apprentice							
Community Program Coordinator							
Digital Content Producer							

Show at least one full calculation for each career.

Base Result Analysis

Which option ranks first?

How many points separate first and second?

Which criterion contributes most to the winning option?

Does any option fail a threshold? What must be verified?

Part 3 - Sensitivity Test A: Creativity Matters More

Change Creativity weight from 2 to 5. Keep all ratings and other weights unchanged. New maximum = 95.

Career	Original total	Remove old creativity points	Add new creativity points	New total	New rank
Cybersecurity Support Specialist					
Electrician Apprentice					
Community Program Coordinator					
Digital Content Producer					

Did the ranking change? Explain why the size of a weight matters.

Part 4 - Sensitivity Test B: Evidence Changes a Rating

Samira verifies that the apprenticeship is less available locally than expected. Change Electrician Apprentice entry-access rating from 5 to 2 under the original weight of 4. Recalculate only the affected career total and rank.

Why is changing a rating different from changing a weight?

Part 5 - Add a Financial Reality Check

The matrix intentionally excludes many financial details. Compare illustrative starting pay with fictional annual preparation-related repayment/cost obligations.

Career	Starting pay	Annual preparation repayment/cost	Cost as % of starting pay
Cybersecurity Support Specialist	\$61,500	\$4,800	
Electrician Apprentice	\$47,000	\$0	
Community Program Coordinator	\$45,500	\$2,400	
Digital Content Producer	\$52,000	\$3,600	

Formula: annual cost / starting pay x 100. Round to the nearest tenth. Explain why this ratio still does not represent a complete budget.

Part 6 - Decision Memo

Memo element	Your evidence
Recommended first option to research	
Base matrix total/rank	
Sensitivity result	
Financial ratio	
Threshold to verify	
Strongest evidence	
Missing information	
Backup option	
Next three research actions	

Write an 8-10 sentence memo. Use the matrix as evidence but state why the recommendation remains provisional.

Self-Check

- ☐ Weights reflect importance; ratings reflect evidence.
- ☐ All products and totals are correct.
- ☐ I completed both sensitivity tests.
- ☐ I checked a financial ratio.
- ☐ My memo identifies thresholds, uncertainty, and next actions.