

CAREER DEVELOPMENT

Career Outlook Analysis

Turn workforce data into cautious, evidence-based career questions

GRADES 9-12	TIME 2 x 42 min	FORMAT Individual + partner	PRODUCT Outlook briefing
YOUR CHALLENGE Analyze a fictional workforce dataset, calculate projected change and wage growth, identify what the numbers can and cannot prove, evaluate source quality, and prepare a balanced career-outlook briefing. The data are simplified for practice and are not current labor-market facts.			

Learning Goals

- Calculate numeric and percentage employment change.
- Distinguish employment growth from annual openings.
- Compare wages without treating salary as the only decision factor.
- Identify uncertainty, geographic limits, and source-quality concerns.
- Write a recommendation that separates evidence from inference.

Key Vocabulary

Term	Meaning
Employment level	Estimated number of workers in an occupation at a point in time.
Projected change	Estimated future employment minus current employment.
Percent change	Projected numeric change divided by current employment, multiplied by 100.
Annual openings	Estimated yearly opportunities from growth and replacement needs.
Median wage	Middle wage: half earn more and half earn less.
Projection	Evidence-based estimate, not a guarantee.
Geography	Area represented by the data; national and local patterns may differ.

Warm-Up

Occupation A grows 20%, while Occupation B grows 5% but has more annual openings. Which is “better”? Explain what information is missing.

Part 1 - Fictional Workforce Dataset

Occupation	Current employment (000s)	Projected employment (000s)	Current median wage	Projected wage*	Annual openings (000s)	Typical preparation note	Uncertainty note
IT Support Specialist	920	1,010	\$52,000	\$61,500	55	Associate/certificate; employer needs vary	Technology changes tasks; customer support remains important
Medical Assistant	780	900	\$41,000	\$47,500	120	Postsecondary certificate often preferred	Demand influenced by health-service use
Graphic Designer	265	270	\$54,000	\$59,000	24	Portfolio; degree requirements vary	Freelance and AI-enabled tools affect work mix
Electrician	760	850	\$62,000	\$72,000	80	Apprenticeship/licensing requirements vary	Construction cycles and retirements affect openings
Logistics Coordinator	410	475	\$57,000	\$66,500	43	Experience, certificate, or degree varies	Automation changes tools, not all coordination needs
Environmental Technician	95	109	\$50,000	\$58,500	9	Associate degree common; field requirements vary	Public funding and regulation affect demand

*Projected wages are fictional nominal dollars and are not adjusted for inflation. Employment and opening figures are in thousands.

Part 2 - Calculate Employment Change

Occupation	Numeric change = projected - current	Percent change = numeric / current x 100
IT Support Specialist		
Medical Assistant		
Graphic Designer		
Electrician		
Logistics Coordinator		
Environmental Technician		

Show setup, arithmetic, and rounding to the nearest tenth of a percent for all six occupations.

Part 3 - Interpret Without Overclaiming

Which occupation has the highest projected percentage growth? Show evidence.

Which has the greatest annual openings? Why can this differ from percentage growth?

Which occupation adds the greatest number of workers?

Which occupation shows the smallest projected percentage growth? Does that mean there will be no opportunities?

Choose two occupations and explain how replacement openings could affect the comparison.

CAUTION A projection describes a model based on assumptions. It does not promise that an

individual will be hired, earn the median wage, or work in a particular location.

Part 4 - Wage Analysis

Occupation	Projected wage increase	Percent wage increase	Inflation question / limitation
IT Support Specialist			
Medical Assistant			
Graphic Designer			
Electrician			
Logistics Coordinator			
Environmental Technician			

Calculate projected wage - current wage, then divide the increase by current wage x 100. Round to the nearest tenth.

Part 5 - Source Quality Test

Source	Description	Credibility: high/medium/low	Evidence and possible bias
Source A	Government labor agency; methodology, date, geography, and revisions published.		
Source B	Training school advertisement: “100% growth and guaranteed high-paying jobs”; no method or geography.		
Source C	Industry association report funded by member employers; data tables included, assumptions partly explained.		
Source D	Social post from an anonymous account citing “everyone knows this career is dying.”		

Verification Checklist

- Who produced the information and why?

- When was it published or updated?
- What geography and population are represented?
- How were estimates produced?
- Are uncertainty, limitations, and revisions visible?
- Can the claim be confirmed with another independent source?

Which two sources would you use first, and how would you use them differently?

Part 6 - Career Outlook Briefing

Choose one occupation and prepare a briefing for a student considering it. Include all fields and use cautious language.

Required element	Your evidence / explanation
Current and projected employment	
Numeric and percent change	
Annual openings	
Current and projected wage	
Preparation question	
One uncertainty or risk	
Two sources to verify real data	
Balanced conclusion	

Write a 6-8 sentence conclusion explaining whether the occupation deserves further research. Do not write “yes/no” as if the data make the decision.

Self-Check

- ☐ All calculations show setup and units.
- ☐ I distinguished growth from openings.
- ☐ I did not treat wages or projections as guarantees.
- ☐ I named geography/source limitations.
- ☐ My conclusion recommends a research step.