

EARNING POTENTIAL



How much does your education level affect your potential salary? Careers that pay the highest salary generally require specific knowledge and unique skills that make people seeking those jobs in more demand. In most cases, acquiring these types of abilities require bachelor's or advanced degrees. Jobs with lower pay generally require less skills and employers can keep the pay lower because it is easier to find a replacement. These jobs usually do not require college education.

What is the long term difference in earnings based on education level? In this project, you will explore this with geometric series. *The United State Department of Labor* has calculated the median annual salaries for each education level in 2014. You will use this total and the average percentage raise from 2014 to estimate the difference in lifetime earnings.

Degree Level	Median Annual Salary	Average Raise each year	Geometric Series in Summation Notation	Earnings After 10 years	Earnings After 20 years	Earnings After 30 years
Doctoral / Professional	\$86,762	3.2%	$\sum_{k=1}^n (86,862)(1.032)^{k-1}$			
Master's	\$69,108	3.1%				
Bachelor's	\$57,616	3.05%				
Associate's or Some College	\$39,104	3.0%				
High School Diploma	\$33,852	2.9%				
Less than a High School Diploma	\$21,144	2.8%				

ANALYSIS: Find the difference in salary between...

1. ...people with a bachelor's degree and a high school diploma over 30 years.
2. ...people with a doctoral degree and a master's degree over 10 years.
3. ...people with a high school diploma and with less than high school diploma over 20 years.

Name _____

Date _____

Period _____