



Project Math TRACK

PBL Lesson Plan Template

Pre-Lesson

	Grade Level: 12th	Teacher Name/School: Takaingofa Pasai Lee Central High School
	Standards Addressed:	PS.SPCR.4 Construct and interpret two-way frequency tables of data when two categories are associated with each object being classified. Use the two-way tables as a sample space to decide if events are independent and to approximate conditional probabilities. <ul style="list-style-type: none"> • use the two-way table as a sample space to decide if events are independent or dependent. • use the two-way table as a sample space to approximate conditional probabilities/proportions.
g	Critical Questions to Consider:	<input type="checkbox"/> Is the problem relevant to content/standard(s) being taught? yes <input type="checkbox"/> Will the problem incorporate multiple instructional and thinking processes? yes <input type="checkbox"/> Can students solve this problem in multiple ways? yes <input type="checkbox"/> Is the problem high-interest? Will it command student attention? Yes <input type="checkbox"/> Will students develop their own ideas and reasoning skills? Yes

Scenario: (no more than 500 words)

The table below shows the listing of years of service for employees at Verizon wireless.

YEARS	0-4	5-9	10-14	14+	TOTALS
MALES	12	6	17	21	56
FEMALES	8	9	13	14	44
TOTALS	20	15	30	35	100

Instructional Activities: (List in numeric order).

1. What is the probability of randomly selecting a female employee?
2. Given that the employee is male, what is the probability that they have less than 4 years of experience?
3. Given that the employee has between 10 and 14 years of experience, what is the probability that the employee is female?
4. Given that the employee has more than 14 years of experience, what is the probability that the employee is male.
5. What is the probability of randomly selecting an employee with less than 14 years of experience given that they are female?

Student Reflection / Assessment Activity:

Students will consider a real world scenario similar to the one in the assignment and come up with their own problem and solution.