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Lesson Plan: Changes in Resources [on Pohnpei]

- I. Project Outline
 - A. Objectives:
 1. To survey how resources on Pohnpei changed in availability as perceived by islanders who lived on island for 30 years or more.
 2. To determine the seasons of the resources.
 - B. Materials:
 - a. Pen and paper
 - C. Procedure:
 - a. Survey through interview with questionnaire with results analyzed by averaging.
 - D. Data and Results
 - a. Table 2- Changes in the availability of resources
 - b. Table 3 – Seasons of resources
 - E. Discussion of Results
 - F. Conclusion

Reference:

Balick, Michael J. *Ethonobotany of Pohnpei: Plants, People and Island Culture*. Honolulu: University of Hawai'i Press. 2009. Print.

Lesson Plan: Changes in Resources on Pohnpei

A. Objectives:

1. To survey how resources on Pohnpei changed in availability as perceived by islanders who lived on island for 30 years or more.
2. To determine the seasons of the resources.

B. Materials: pen and paper, pictures if available, questionnaire

C. Procedure:

1. Interview 10 people aged 30 years old or more who lived in your community for 30 years or more. Base your questions on the questionnaire attached.
2. Input the numbers representing the responses in the attached tally sheet based on the following:

Rating	Descriptive Rating	Computed Average
1	Decreased much	0.5 – 1.5
2	Decreased a little	1.6 - 2.5
3	Unchanged or the same	2.6 – 3.5
4	Increased a little	3.6 – 4.5
5	Increased much	4.6 - 5

3. Compute for the average of the responses per item.
4. Compute for the average of the responses per group.
5. Input the averages in the final report. Refer to the table above for the descriptive rating corresponding to the computed average.
6. Include old pictures of the community if available.
7. Interpret results in the discussion of results.
8. Answer the objectives in the conclusion.
9. Submit the tally sheet with the final report.

D. Data and Results:

Table 1 Description of Respondents:

Items	Description
Community	
Municipality	
Average age	

Table 2. Changes in the availability of resources

Rate how the following resources changed in availability or supply by comparing when you were young and at these times.

Items	Rating	Descriptive Rating
A. Local Food resources		
a. Local cash crops		
1. Karat banana		
2. Other bananas		
3. Taro		
4. Yam		
5. Bread fruit		
6. Pandanus		
7. coconut		
8. betel nut		
9. sakau for sale		
Average		
b. Fruits		
1. Sour sop		
2. Lemon		
3. Mango		
4. guava		
5. Pohnpeian Apple		
Average		
c. Coastal fisheries		
1. Bumphead parrotfish		
2. Groupers		
3. Hawksbill turtle		
4. Green turtle		
5. Mangrove crab		
6. Coconut crab		
7. lobster		
8. trochus shell fish		
9. pearl oyster		
10. sea cucumbers		
11. giant clams		
Average		
d. Other fish		
1. Tuna		
2. Manta ray		
3. eel		
4. sharks		
Average		

e. Locally grown vegetables (Introduced)		
1. Water melon		
2. Cucumber		
3. Cabbage		
4. Chinese bok choy		
5. Egg plants		
Average		
B. Imported food		
1. Rice		
2. Alcoholic drinks		
3. soda		
4. bottled water		
5. canned goods		
6. meat – pork, chicken, turkey		
7. noodles		
Average		
C. Natural resources		
1. Piped water in houses		
2. Clean drinking water		
3. Clean river water		
4. Forest trees		
5. Mangroves		
6. Corals		
7. Fisheries in general		
Average		
D. Other resources		
1. Electricity		
2. Medicinal plants		
3. Varieties of bananas		
4. Varieties of taro		
5. Commercial medicine		
Average		

Table 3. Seasons of resources.
 The months when the resources are plentiful for harvest.

Resources	Season
A. Cash crops	
1. Karat banana	
2. Taro	
3. Yam	
4. Bread fruit	
5. Pandanus	
1. Sour sop	
2. Lemon	
3. Mango	
4. guava	
5. Pohnpeian Apple	
B. Coastal fisheries	
1. Bumphead parrotfish	
2. Groupers	
3. Hawksbill turtle	
4. Green turtle	
5. Mangrove crab	
6. Coconut crab	
7. lobster	
8. trochus shell fish	
9. pearl oyster	
10. sea cucumbers	
11. giant clams	
C. Other fish	
1. Tuna	
2. Manta ray	
3. eel	
4. sharks	

E. Discussion of Results

F. Conclusion

1. Questionnaire

Changes in Resources on Pohnpei

Interview 10 persons in your community aged 30 years old and above and have lived on island for 20 years or more.

Answer the following:

1. Community: _____
2. Municipality: _____
3. Names of Person interviewed _____
4. Age: _____ (must be 30 years old and above)

Rate the change in availability of the following resources by encircling the appropriate number. Compare the availability when you were young and at these times. Base your answer on the following:

Rating	Descriptive Rating
1	Decreased much
2	Decreased a little
3	Unchanged or the same
4	Increased a little
5	Increased much

Items	Rating				
A. Local Food resources					
a. Local cash crops					
1. Karat banana	1	2	3	4	5
2. Other bananas	1	2	3	4	5
3. Taro	1	2	3	4	5
4. Yam	1	2	3	4	5
5. Bread fruit	1	2	3	4	5
6. Pandanus	1	2	3	4	5
7. coconut	1	2	3	4	5
8. betel nut	1	2	3	4	5
9. sakau for sale	1	2	3	4	5
b. Fruits					
1. Sour sop	1	2	3	4	5
2. Lemon	1	2	3	4	5
3. Mango	1	2	3	4	5
4. guava	1	2	3	4	5
5. Pohnpeian Apple	1	2	3	4	5
c. Coastal fisheries					
1. Bumphead parrotfish	1	2	3	4	5
2. Groupers	1	2	3	4	5
3. Hawksbill turtle	1	2	3	4	5

4. Green turtle	1	2	3	4	5
5. Mangrove crab	1	2	3	4	5
6. Coconut crab	1	2	3	4	5
7. lobster	1	2	3	4	5
8. trochus shell fish	1	2	3	4	5
9. pearl oyster	1	2	3	4	5
10. sea cucumbers	1	2	3	4	5
11. giant clams	1	2	3	4	5
d. Other fish					
1. Tuna	1	2	3	4	5
2. Manta ray	1	2	3	4	5
3. eel	1	2	3	4	5
4. sharks	1	2	3	4	5
e. Locally grown vegetables (Introduced)					
6. Water melon	1	2	3	4	5
7. Cucumber	1	2	3	4	5
8. Cabbage	1	2	3	4	5
9. Chinese bok choy	1	2	3	4	5
10. Egg plants	1	2	3	4	5
B. Imported food					
1. Rice	1	2	3	4	5
2. Alcoholic drinks	1	2	3	4	5
3. soda	1	2	3	4	5
4. bottled water	1	2	3	4	5
5. canned goods	1	2	3	4	5
6. meat – pork, chicken, turkey	1	2	3	4	5
7. noodles	1	2	3	4	5
Average					
C. Natural resources					
1. Piped water in houses	1	2	3	4	5
2. Clean drinking water	1	2	3	4	5
3. Clean river water	1	2	3	4	5
4. Forest trees	1	2	3	4	5
5. Mangroves	1	2	3	4	5
6. Corals	1	2	3	4	5
7. Fisheries in general	1	2	3	4	5
D. Other resources					
1. Electricity	1	2	3	4	5
2. Medicinal plants	1	2	3	4	5
3. Varieties of bananas	1	2	3	4	5
4. Varieties of taro	1	2	3	4	5
5. Commercial medicine	1	2	3	4	5

Table 3 Seasons of Resources

Check the months when the resources were plentiful for harvest.

Resources	Months											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
G. Cash crops												
6. Karat banana												
7. Taro												
8. Yam												
9. Bread fruit												
10. Pandanus												
11. Sour sop												
12. Lemon												
13. Mango												
14. guava												
15. Pohnpeian Apple												
H. Coastal fisheries												
12. Bumphead parrotfish												
13. Groupers												
14. Hawksbill turtle												
15. Green turtle												
16. Mangrove crab												
17. Coconut crab												
18. lobster												
19. trochus shell fish												
20. pearl oyster												
21. sea cucumbers												
22. giant clams												
I. Other fish												
5. Tuna												
6. Manta ray												
7. eel												
8. sharks												

2. Tally Sheet. For 10 persons interviewed.

Table 1 Description of Respondents:

Items	Description
Community	
Municipality	
Average age	
Names of people interviewed	
1	6
2	7
3	8
4	9
5	10

Table 2. Changes in resources

Procedure:

1. Input all the responses of person 1 under "1" and do the same for the others.
2. Add up all the responses of persons 1-10 for karat banana then divide by 10 to get the average per crop (average per row)
3. Add up all the averages per crop then divide by the number of crops to get the average per column. For example, add up all the averages for karat to sakau then divide the sum by 9 for letter a. local cash crops.
4. Transfer these averages to the final report.

Items	Rating										Average
	1	2	3	4	5	6	7	8	9	10	
Age											
A. Local Food resources											
a. Local cash crops											
1. Karat banana											
2. Other bananas											
3. Taro											
4. Yam											
5. Bread fruit											
6. Pandanus											
7. coconut											
8. betel nut											
9. sakau for sale											
Average											
b. Fruits											
1. Sour sop											
2. Lemon											
3. Mango											
4. guava											
5. Pohnpeian Apple											
Average											

c. Coastal fisheries																				
1. Bumphead parrotfish																				
2. Groupers																				
3. Hawksbill turtle																				
4. Green turtle																				
5. Mangrove crab																				
6. Coconut crab																				
7. lobster																				
8. trochus shell fish																				
9. pearl oyster																				
10. sea cucumbers																				
11. giant clams																				
Average																				
d. Other fish																				
1. Tuna																				
2. Manta ray																				
3. eel																				
4. sharks																				
Average																				
e. Locally grown vegetables (Introduced)																				
1. Water melon																				
2. Cucumber																				
3. Cabbage																				
4. Chinese bok choy																				
5. Egg plants																				
Average																				
B. Imported food																				
1. Rice																				
2. Alcoholic drinks																				
3. soda																				
4. bottled water																				
5. canned goods																				
6. meat – pork, chicken, turkey																				
7. noodles																				
Average																				
C. Natural resources																				
1. Piped water in houses																				
2. Clean drinking water																				
3. Clean river water																				
4. Forest trees																				
5. Mangroves																				
6. Corals																				
7. Fisheries in general																				
Average																				

D. Other resources											
1. Electricity											
2. Medicinal plants											
3. Varieties of bananas											
4. Varieties of taro											
5. Commercial medicine											
Average											

Table 3.Seasons of resources

Procedure:

1. Number the months from 1 -12

Month	Number	Average	Month	Number	Average
January	1	0.5-1.5	July	7	6.6-7.5
February	2	1.6-2.5	August	8	7.6-8.5
March	3	2.6-3.5	September	9	8.6-9.5
April	4	3.6-4.5	October	10	9.6-10.5
May	5	4.6-5.5	November	11	10.6-11.5
June	6	5.6-6.5	December	12	11.6-12

2. Input the number of the month corresponding to the start and the number of the month corresponding to the end of the season for karat banana for the responses of person 1 . For example, if the response of person 1 for the season of karat is from March to June, write 3 under column 1 under start and write 6 under column 1 under end for karat.
3. Do the same all the respondents and the crops.
4. Add up all the responses of the 10 persons for start for karat. Divide the sum by 10 and write the average.
5. Do the same for the end of the season.
6. Input the consolidated start and end of the season of the crop based on the above table in the final report. For example, for karat, the computed average for start is 2.6 (March) and end is 6.2 (June). The season for karat is March to June.

Resources	Season in Months																					
	Start											End										
Interviewee	1	2	3	4	5	6	7	8	9	10	Ave.	1	2	3	4	5	6	7	8	9	10	Ave.
A. Cash crops																						
1. Karat banana																						
2. Taro																						
3. Yam																						
4. Bread fruit																						
5. Pandanus																						
6. Sour sop																						
7. Lemon																						
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