



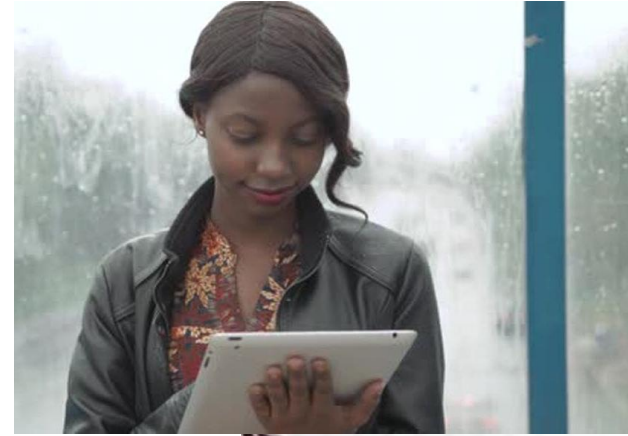
Hands-on Activities in e-Learning

Teaching Impact-based Forecast and Warning Services online

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e-Learning: a Good Investment

- Excellent e-learning is available any time
- Positive learning experiences help learners to perform better and contribute to the organization



e-Learning: a Good Investment

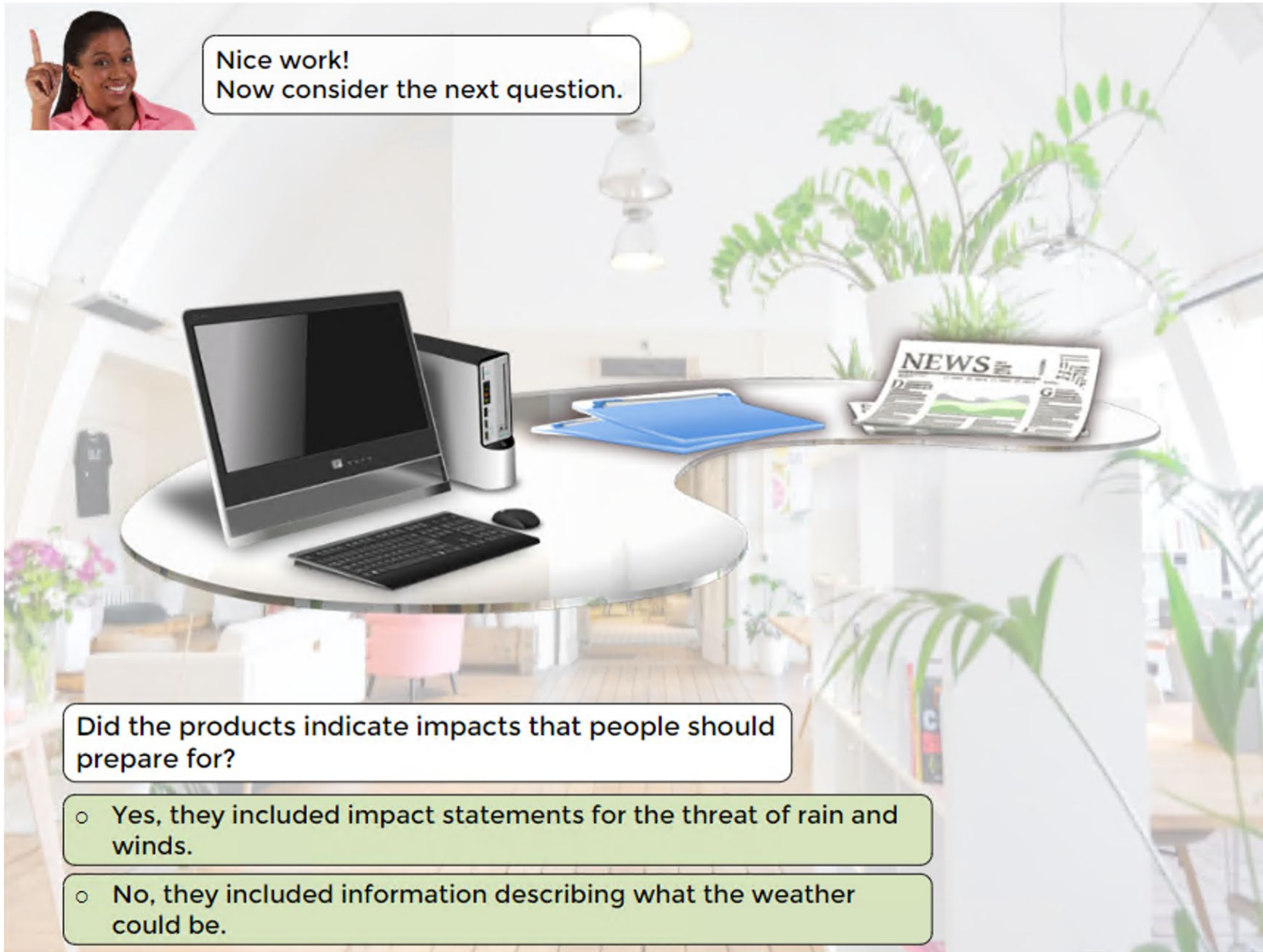
“To learn is an action taken by and occurring within the learner. Instructors cannot learn for their learners, and neither can e-Learning technology even with all its graphics, animations, effects, audio, interactivity, and so on. Learners must be active participants and, in the end, do the learning.” (Allen, 2016, p.122)



Determining Current Conditions - Demo



Nice work!
Now consider the next question.



Did the products indicate impacts that people should prepare for?

- Yes, they included impact statements for the threat of rain and winds.
- No, they included information describing what the weather could be.

Creating a Roadmap - Demo



It's time to prepare a roadmap of actions to close these gaps. Review the gaps for the outcome below, and match the action to the gap it will address. Be careful... if you don't match the correct actions, an IBF partner may leave!

Outcome: Provide information to people that will help them make informed decisions and take appropriate preparedness actions

Partners



Gaps

Roadmap

Actions

Current forecasts do not include impact statements describing what the weather will do

Current forecasts lack actionable information to help people prepare for threats

Current forecasts use meteorological terms to state what the weather will be

Meteorologists do not have the communication skills to create impact statements that are easy to understand

Remove meteorological terminology from forecast and warning messages

Write impact statements for different levels of threats posed by each weather hazard

Collaborate with media organizations to test the wording of forecast and warning templates with people from local communities

Work with communication experts, media, and emergency managers to prepare impact tables for various hazards

Work with communication experts to prepare forecast and warning templates for each hazard that say what the weather will do

Creating a Roadmap - Demo



Well done! You have successfully practiced the four steps for implementing IBF in your NMHS. Here is what we found.

Communicate Weather Impacts

Current Conditions Where you are now?	Desired Outcomes Where would you like to be?	Identified Gaps Difference between desired and current state	Activities Activities to address the gaps
The meteorological and hydrological forecasts were issued on time.	Provide information to people that will help them make informed decisions and take appropriate preparedness actions	Current forecasts do not include impact statements describing what the weather will do	Work with communication experts, media, and emergency managers to prepare impact tables for various hazards
The hydrological forecast did not mention urban flash flooding.			Work with communication experts to prepare forecast and warning templates for each hazard that say what the weather will do
The forecast did not indicate what impacts people should prepare for with the tropical storm.		Current forecasts lack actionable information to help people prepare for threats	Write impact statements for different levels of threats posed by each weather hazard
A major flood destroyed homes and thousands live in shelters.		Current forecasts use meteorological terms to state what the weather will be	Remove meteorological terminology from forecast and warning messages
		Meteorologists do not have the communication skills to create impact statements that are easy to understand	Collaborate with media organizations to test the wording of forecast and warning templates with people from local communities

Next

Practicing Communication - Demo

Mouse over a person to learn about them. Start with the Coach.



Coach

Begin



Tourism Bureau

Begin



Disaster Preparedness

Begin



Hydroelectric Company

Begin



Weather Observer

Begin



Local News Media

Begin

Practicing Communication - Demo

How will you restate this concern?

“We don't have the meteorological expertise to help you identify weather thresholds for warnings.”

- Your staff don't know meteorology and cannot help us write better weather warnings
- Your staff have no meteorological background and cannot help us identify weather thresholds



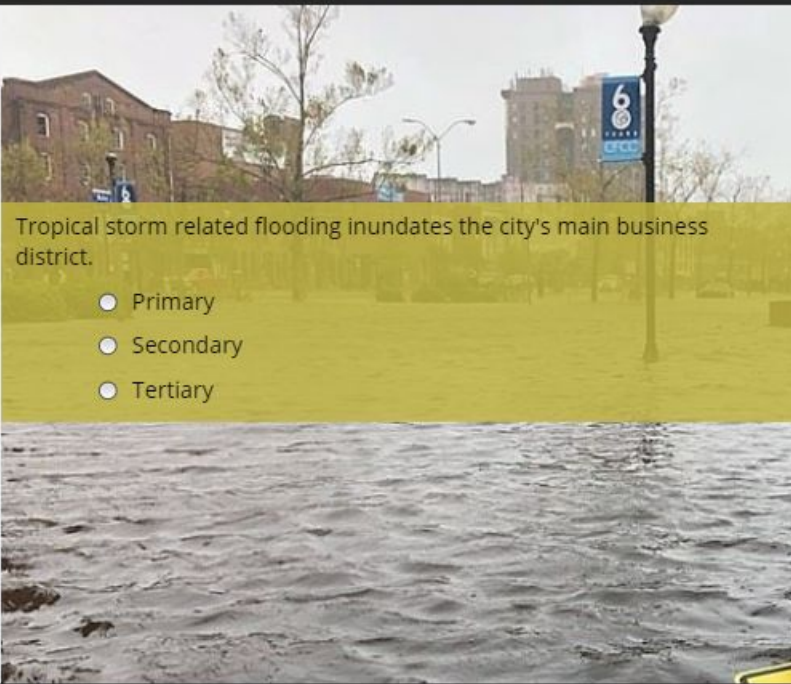
Evaluating Hazards, Exposure, and Vulnerability

- Explore the concepts of hazards, exposure, and vulnerability
- Step through the process of gathering and evaluating data to create an impacts table for a location

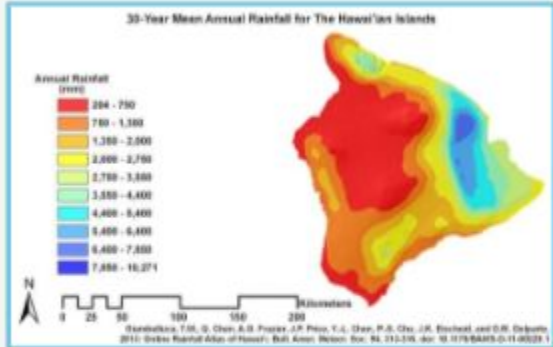
Identify whether each hazard is Primary, Secondary, or Tertiary.

Tropical storm related flooding inundates the city's main business district.

- ☐ Primary
- ☐ Secondary
- ☐ Tertiary



News about past significant weather events and inundation maps from those events can give you information about possible hazards. Historical rain gauge and stream gauge data can also be useful.




30-Year Mean Annual Rainfall for The Hawaiian Islands

Annual Rainfall (mm)

- 200 - 750
- 750 - 1,500
- 1,500 - 2,000
- 2,000 - 2,700
- 2,700 - 3,000
- 3,000 - 4,000
- 4,000 - 5,000
- 5,000 - 6,000
- 6,000 - 7,000
- 7,000 - 10,274

Population changes in the region, will help you determine exposure.



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