

# Reusable Learning Objects: What Students are Really Thinking

USDA – NIFA

Project #2016-2015-08085

Drs. Nicole Stedman, Amy Harder, and Grady Roberts  
University of Florida



TEXAS A&M  
UNIVERSITY.



THE UNIVERSITY OF  
TENNESSEE



28%



100%



5.8 million

# Teaching Locally, Engaging Globally



PROVIDE FACULTY  
DEVELOPMENT.



TARGETED INTERNATIONAL  
EXPERIENCE.



FACULTY DEVELOP  
SCENARIO-BASED REUSABLE  
LEARNING OBJECTS.



FACULTY USE SCENARIOS TO  
DEVELOP CRITICAL  
THINKING.

# TLEG 3

- Focus on faculty development related to critical thinking pedagogy and central priority areas of Climate Change and Food Security and Hunger
- Unified effort to visit Belize
- Emphasis on RLO creation around a case-based scenario related to international and cultural affects of Climate Change and Food Security and Hunger in a disciplinary focus



# Global Thinking Academy

- What is critical thinking?
  - Teaching for critical thinking.
  - Instructional design.
  - Scenario development.
  - Using digital media to enhance instruction.
- 
- Teaching contentious subjects.
  - Global food security and hunger basics.
  - Teaching globally-relevant topics.
  - Synthesizing modules 1-8.

# Scenarios: What they are and are not

Scenarios Are Not...	They Are...
Predictions	Descriptions of plausible futures
Variations around a midpoint	Significantly different views of the future
Single endpoint	“Movies” of evolving dynamics of the future
Generalized views of feared or desired futures	“Decision-focused” views of the future
Products of outside futurists	Results of researcher insight and perceptions

Scenarios are frameworks for structuring executives' perceptions about alternative future environments in which their decisions might be played out (Wilson & Ralston, 2006, p. 16).



## Scenario Development: Four of the 18 Steps (see handout)

- Step 8 – Identifying Decision Factors
  - Key Decision Factors (KDF) are the main subjects of the scenarios. The focus of the scenarios are clear and stated.
- Step 9 – Identifying Critical Forces and Drivers
  - The scenario team must examine the forces and drivers of the scenario. These forces and drivers define the team's future.

Scenario  
Development:  
Four of the 18  
Steps (see  
handout)

- Step 12 – Identifying High Impact/High Uncertainty Forces
  - The data you collected will indicate what high impact/high uncertainty forces may affect the scenario.
- Step 15 – Rehearsing the Future with Scenarios
  - The scenario team is placed in decision-making roles to prepare for any new threats or opportunities that the future might bring them.



Menu

- Leading in Uncertain Times: Climate...
- Leading in Uncertain Times:**
- Learning Objective(s)
- Operational Definitions
- Operational Definitions
- Overview of Belize
- Overview of Belize
- Overview of Belize
- Overview of Belize
- Critical Forces and Drivers
- High Impact/High Uncertainty For...
- New Threats or Opportunities
- Future Scenarios
- Scenario 1: Hurricane Impact
- Scenario 2: Increased Citrus Prod...
- Scenario 3: Mennonite Reimburs...
- Scenario Response Activity
- Scenarios Summary
- References and Additional Resou...
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# LEADING IN UNCERTAIN TIMES: CLIMATE CHANGE, INFRASTRUCTURE, AND FOOD SECURITY

Laura Greenhaw, Ph.D.  
Mississippi State University



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## Learning Objective(s)

Provided the context information and potential scenarios regarding Belize, the students will be able to:

- Explain 3 infrastructure necessities for agricultural production
- Identify barriers and opportunities for transporting agricultural products
- Recommend decisions regarding infrastructure that will contribute to food security
- Describe leadership competencies that could be applied in addressing potential scenarios



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## New Threats or Opportunities

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## Future Scenarios

1. Infrastructure is impacted by a damaging hurricane
2. Citrus prices rise, production expands
3. Mennonite communities request compensation for contribution to public works

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## Scenario 1: Hurricane Impact

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## Scenarios Summary

For each of the three scenarios,

- What infrastructure recommendations did you consider?
- What barriers did you identify within the infrastructure system? Opportunities?
- What recommendations would you make to the Ministry of Works to ensure food security for Belize?

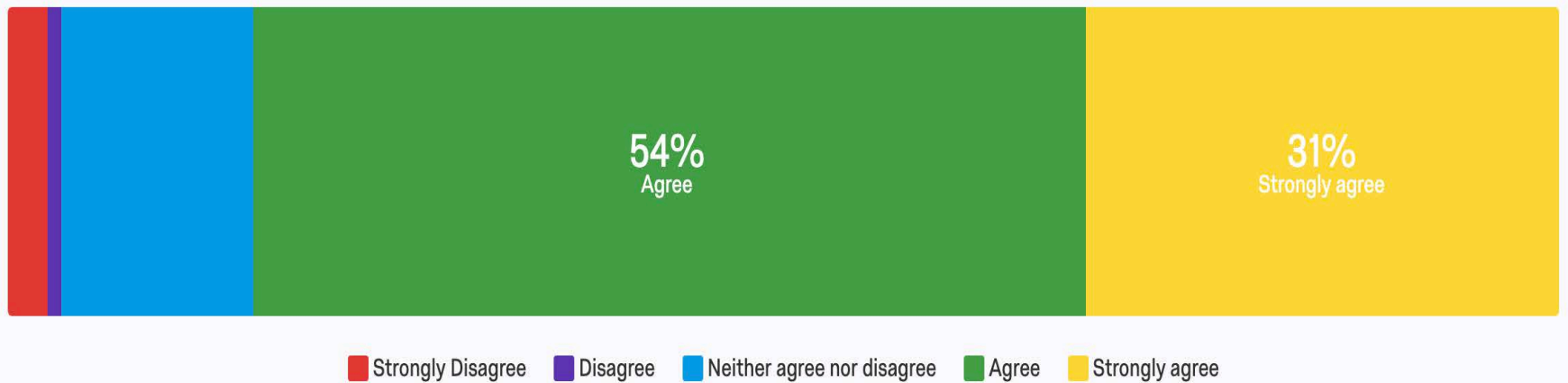


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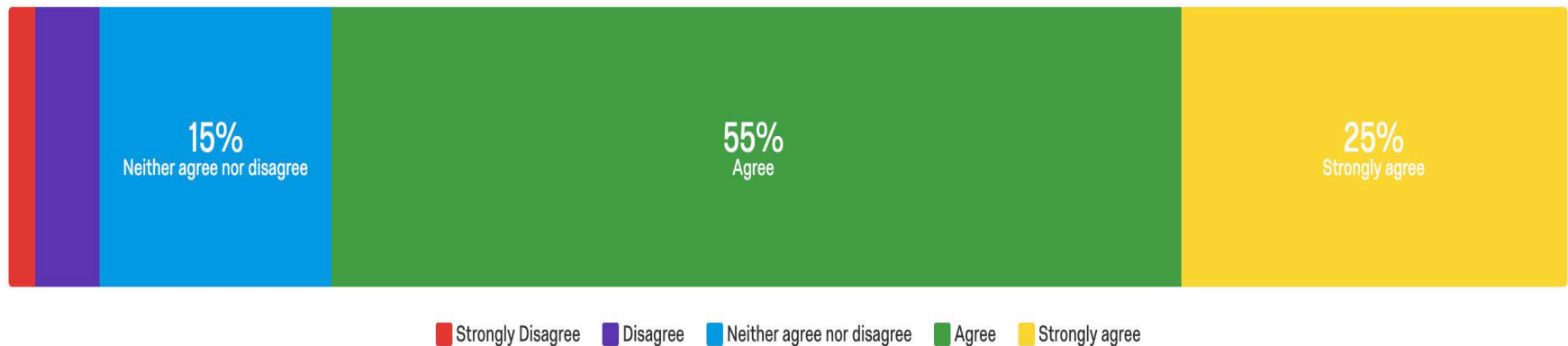


# Student Feedback – I enjoyed learning from scenarios



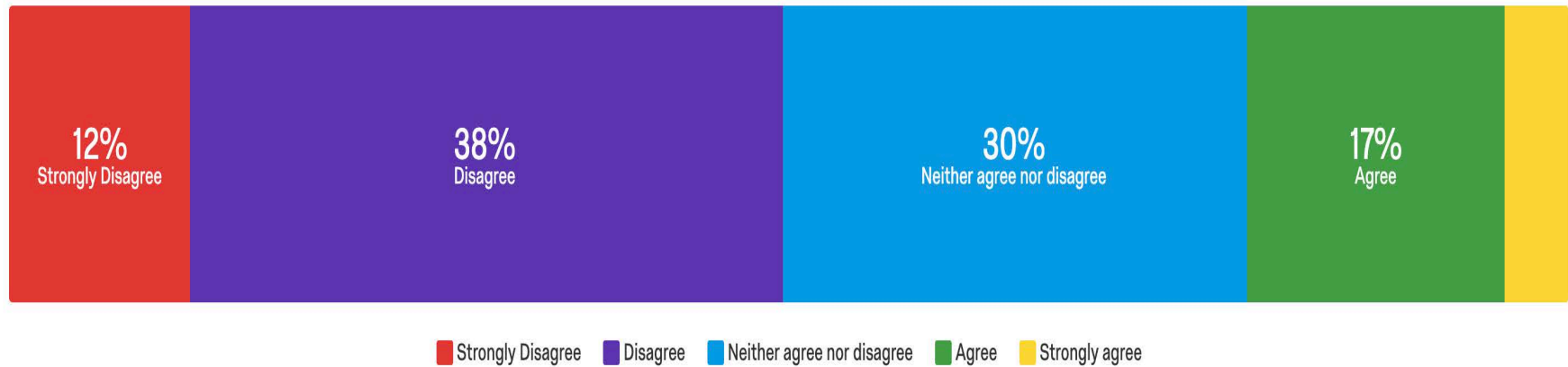
Reusable learning objects should be utilized more often to deliver instruction.

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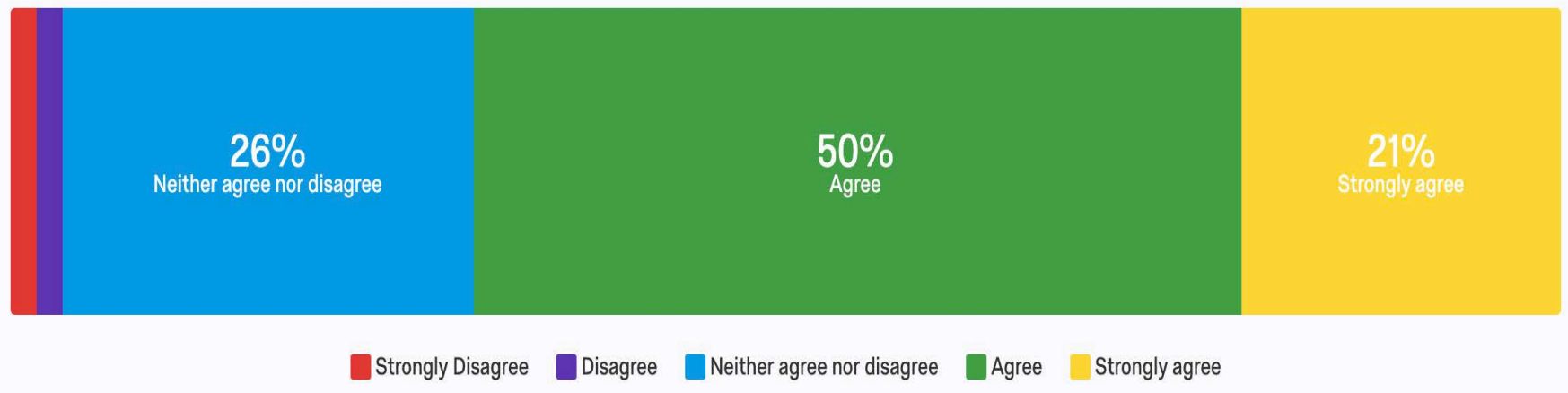
I feel more isolated as a student when I take courses that use reusable learning objects.

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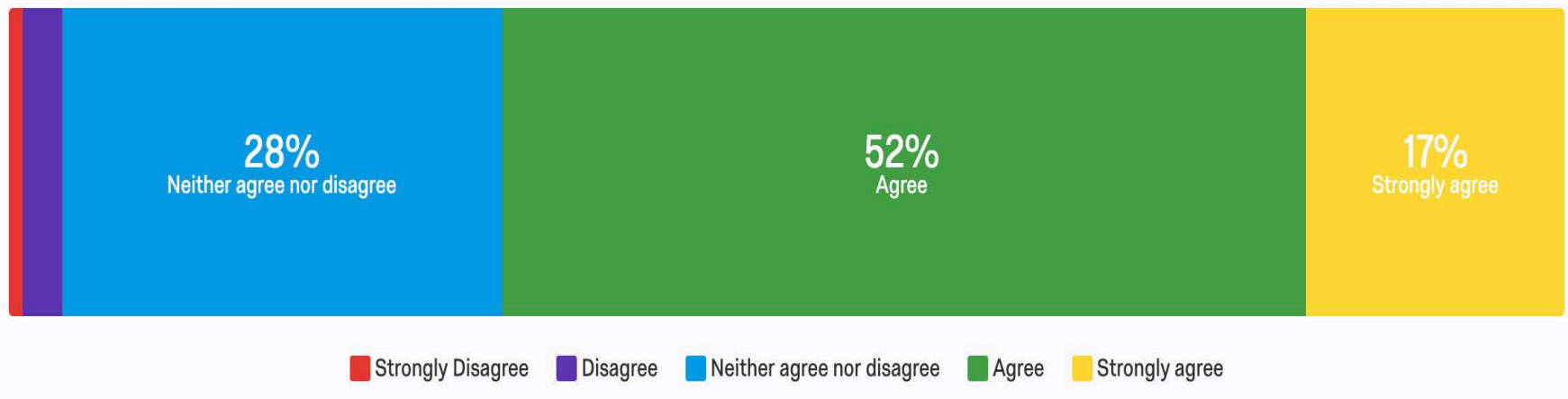


I would recommend courses that use reusable learning objects to my friends.

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Reusable learning objects allow me to control the pace of my learning.



# Final Thoughts

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Value of online instructional tools should be considered when implementing them in the classroom

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Online content, balanced with student-to-student engagement can strengthen the perception of the learning environment

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Students have have a variety of tools they are exposed to during their academic careers, creating ones which are complementary to their needs and preferences is key

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