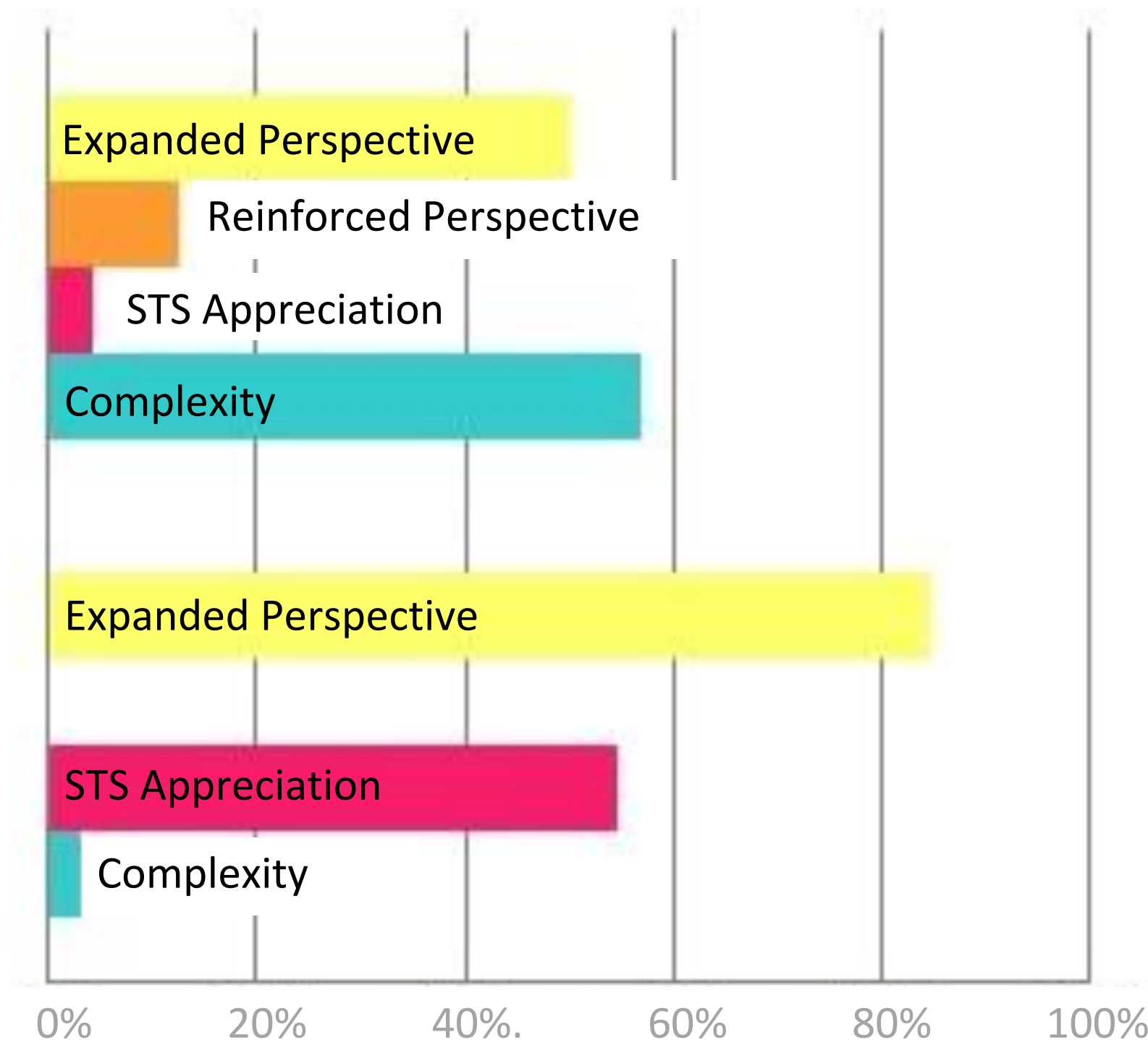


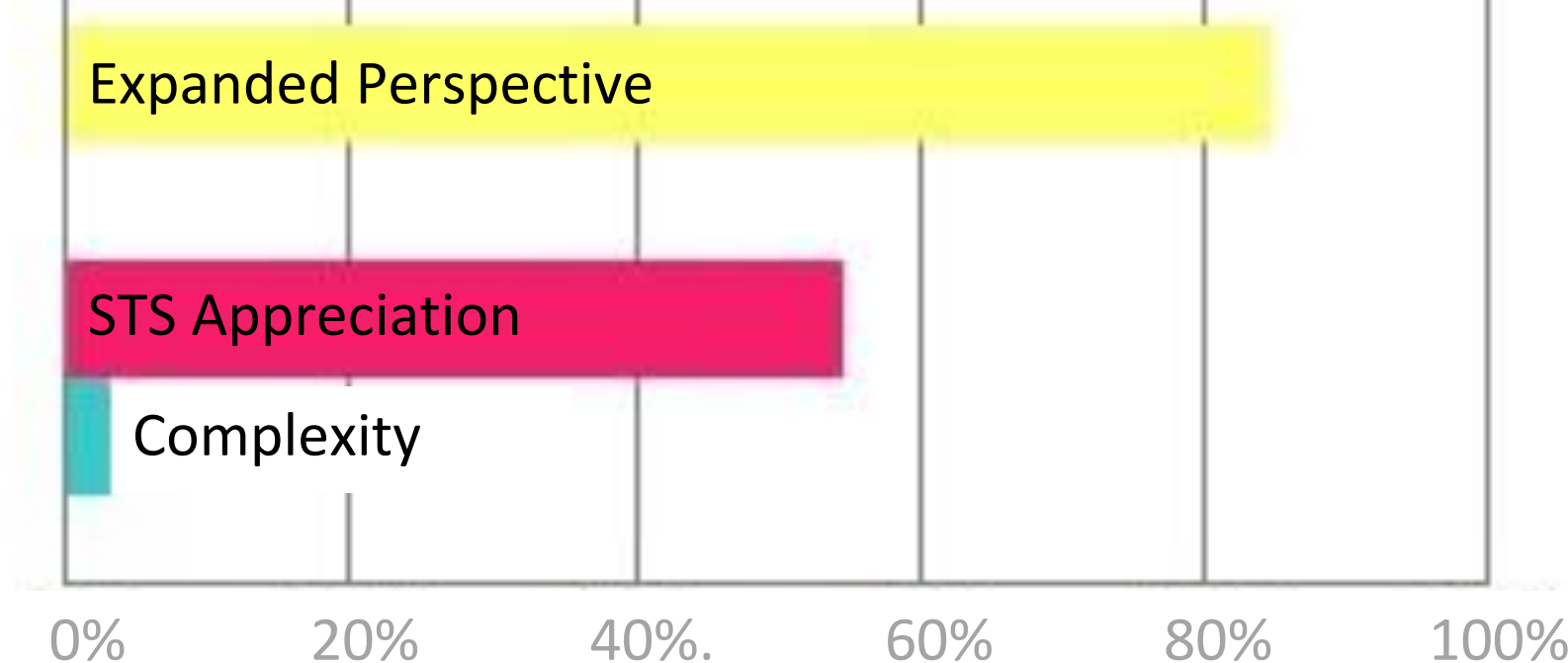
## Construct B SCIENCE AS HUMAN ENDEAVOR *What is doing scientific work like and why?*

Expanded Perspective	Described one or more ways scholar broadened their view
Reinforced Perspective	Shared how scholar's view matched or refined their existing beliefs
STS Appreciation	Noted importance of historical, social and/or interdisciplinary analysis
Complexity	Noted wide range of factors involved

Café on **Bee Colony Collapse Disorder** (n=66)



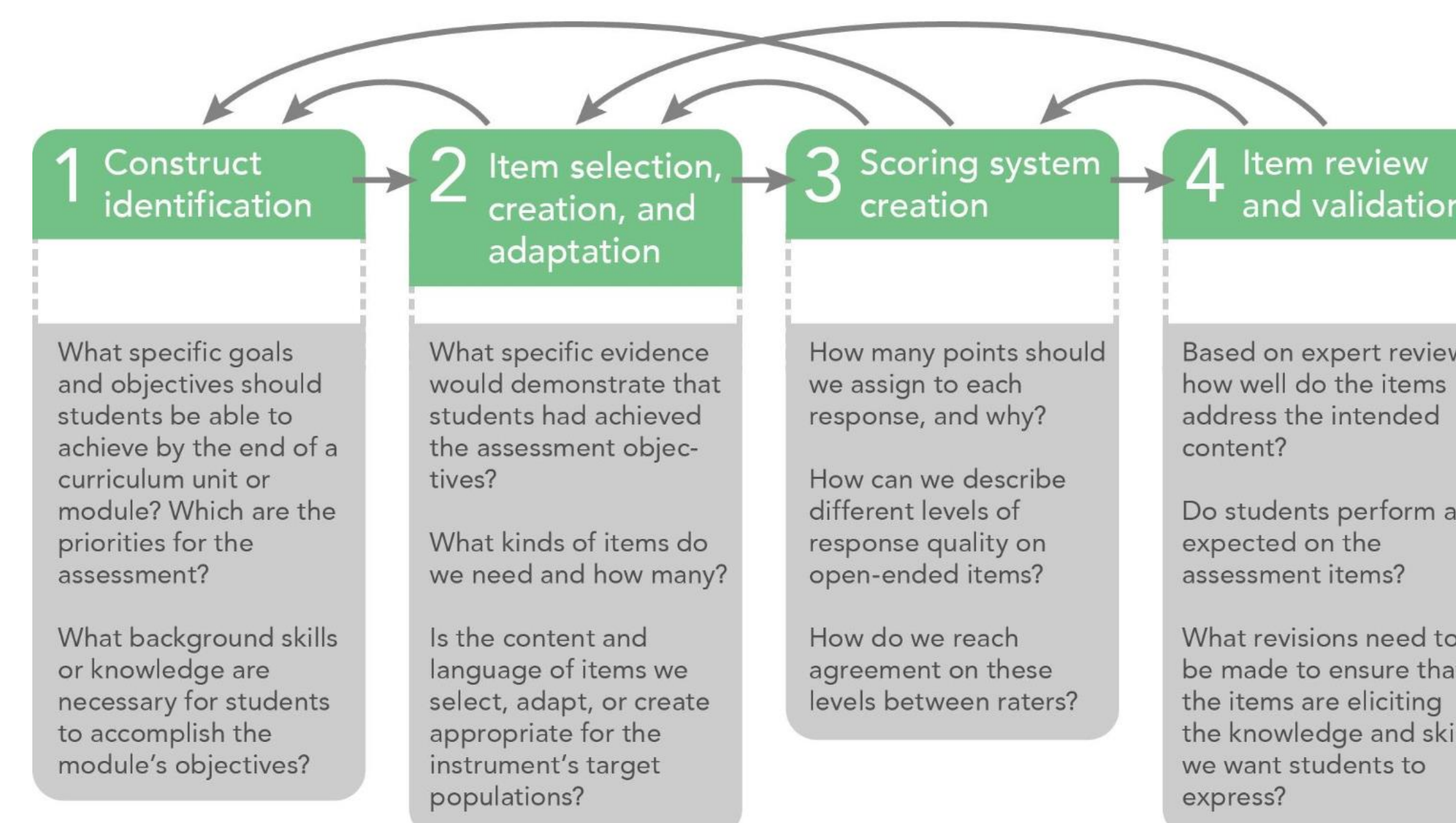
Café on **Car Regulation & Technology** (n=54)



## STS Scholars in Science Cafés

Historians, Philosophers, Sociologists of Science Giving 30-min talks + 30-min Q&A discussions

## Assessment Development Model [Rockman et al](#) Research & Evaluation



Bass, K. M., Drits-Esser, D. & Stark, L. A. (2016). A primer for developing measures of science content knowledge for small-scale research & instructional use. *CBE-Life Sci. Ed.*, 15(2),114.

## Challenges

- Adult learners not blank slates & face barriers to participation in science cafés
- STS (Science and Technology Studies): 'nature of science' assessed in K-12 but less developed work on ISE

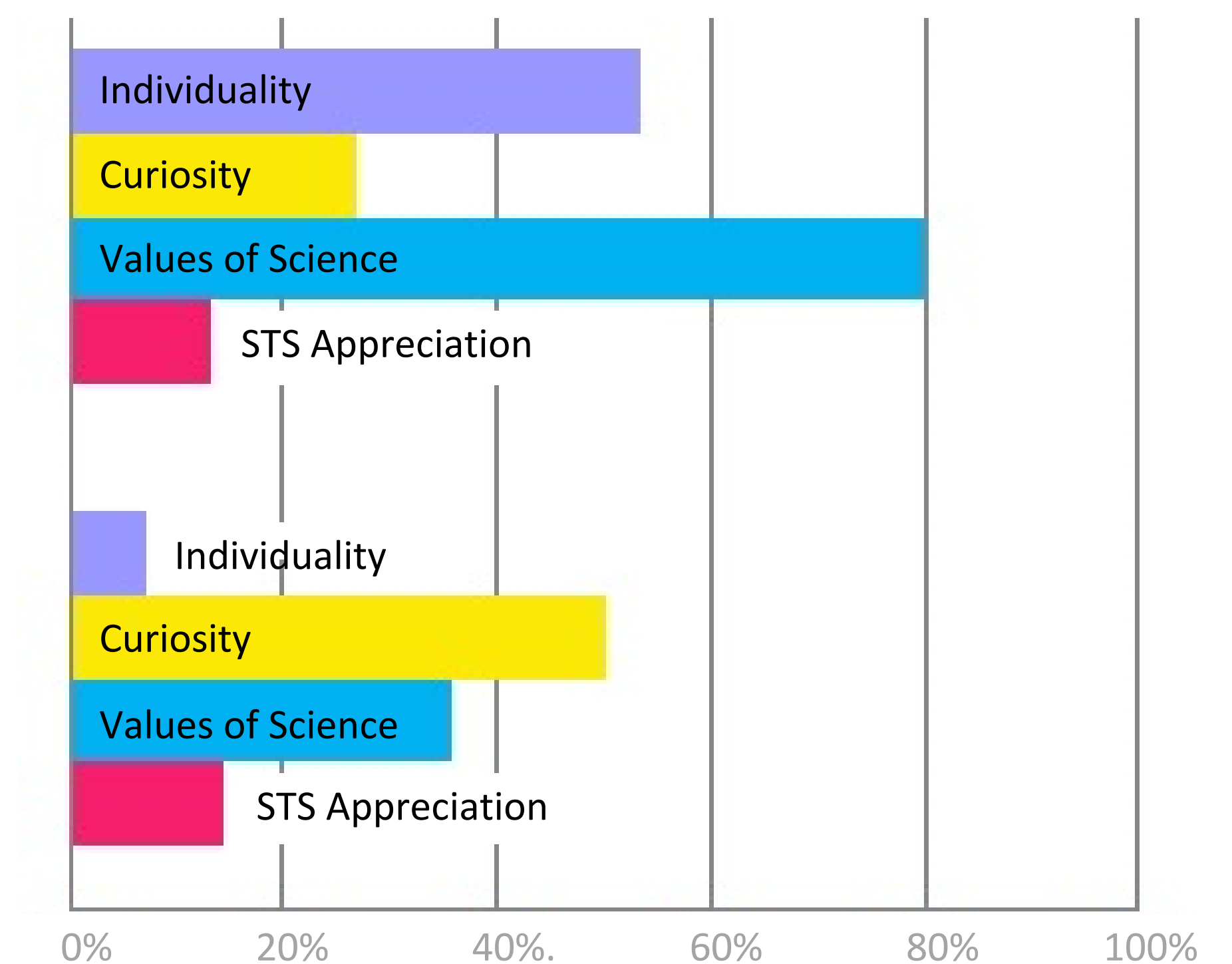
## Achievements

- Community Engagement: Six programs with Richmond, VA science café & university partners
- Refined H.S. STS assessment constructs to assess lifelong learning with flexible curriculum

## Construct C DEVELOPMENT OF SCIENCE IDEAS *What shaped the growth of scientific knowledge?*

Individuality	Described unique perspective and drive of scientist as primary
Curiosity	Expressed importance of "questioning" or "inquiry"
Values of Science	Declared knowledge was shaped by science's values or norms
STS Appreciation	Commented on STS idea that had shaped their perspective

Café on **STEM Diversity** (n=54)



Café on **Synthetic Biology** (n=78)

