

# Communicating Ocean Sciences to Informal Audiences

## Session 8. Creating an Inclusive Learning Environment

# Quick Write



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Communicating Ocean Sciences  
to Informal Audiences



All students, regardless of age, sex, cultural or ethnic background, disabilities, aspirations, or interest and motivation in science, should have the opportunity to attain high levels of scientific literacy.

*National Science Education Standards*

# Discussion Guidelines

- Be open and honest
- Respect the confidentiality of others
- Be an active participant
- See things in a new light-- try to see from perspectives other than your own.

# Think-Pair-Share

- Discuss times when you felt excluded, or a time you felt a stereotype was used for or against you.

# MANZANA Y OCEANO

# Manzana y Océano Debrief

- What were you feeling during that lesson?
- What types of strategies did the instructor use to make you feel included?
- What strategies and structures helped you understand the lesson?



# Culture

- Identifying cultural values, examining how they relate to behaviors, and how these behaviors may be perceived by others can help dispel cultural misunderstandings.
- Gaining an understanding of a group can help improve our understanding of individuals in it, **AND** it is crucial to **remember not to stereotype** all individuals within a group by automatically ascribing group traits to them.

# Cultured defined

As defined by *Webster's Third New International Dictionary*:

“The body of customary beliefs, social forms, and material traits constituting a distinct complex of tradition of a racial, religious or social group” and as “a complex of typical behavior or standardized social characteristics peculiar to a specific group, occupation, or profession, sex, age, grade or social class.”

# Small Group Discussion

- Why do problems sometimes arise when people from different cultures interact?

# Why do problems arise when people from different cultures interact?

- Misunderstandings: language, body language
- Conflicting values
- Conflicting behaviors
- Grouping with those who are similar/familiar
- Excluding those who are different/unfamiliar



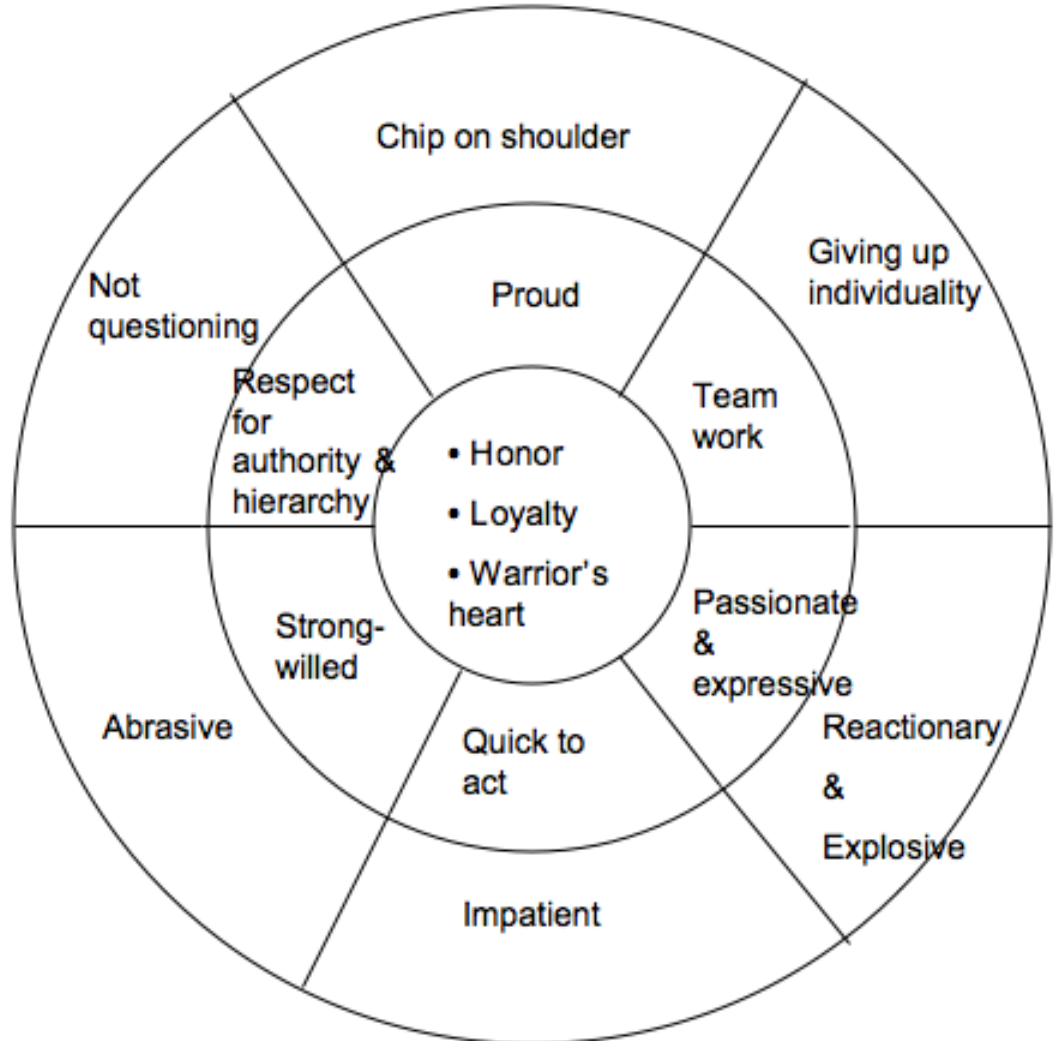
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# Klingon Values Chart



# Core Values Chart

Individualism	Harmony	Knowledge	Respect
Relationships	Group decisions	Resourcefulness	Primary control
Spontaneity	Personal growth	Freedom of expression	Pride

# Characteristics

## Positive perception

## Negative perception

Team Work	Giving up individuality
Rational & efficient	Cold & calculating
Respect for authority & Hierarchy	Not questioning
Oral tradition	Less literate
Indirect communication	Not expressive
Pride	Chip on shoulder
Holistic thinking & affective	Less rational & Emotional
Frugal	Tightwad
Creative problem-solving	Rebellious
Saving Face	Non-assertive
Thoughtful	Slow to respond
Loyalty	Submissive
Group decision-making & Consensus	Not speaking up
Improvisational & Creative self-expression	Flashy & Undisciplined
Think before react	Not expressive
Take charge & responsibility	Pushy
Communal cooperative activities	Grouping together
Strong-willed	Abrasive
Passionate & Expressive	Reactionary & Explosive
Keeps things light w/ humor	Unfocused



# Cultural Capital

## Funds of Knowledge

*Historically developed and accumulated strategies (skills, abilities, ideas) or bodies of knowledge that prove useful in a household, group, or community.*

## Deficit-Model Thinking

*Often implies or even explicitly states that the cultural values and knowledge that circulate in non-dominant cultural groups are deficient, not useful, or even counterproductive.*

# Think-Pair-Share

How would an educator's choices be different about how to interact with a learner depending on whether the educator viewed the student as having a “fund of knowledge” or a “deficit?”

# Modify an Activity



# Self-Reflection Quick Write

- Summarize your thinking about creating an inclusive learning environment and the role educators can play.
- If you can, please include:
  - How have your ideas changed?
  - What do you think made your ideas change?
  - How might you use this in your science teaching?

# Homework

- Reading
  - *Marine Biology*
    - Ch 13, Life on the Continental Shelf, pp. 297-305.
  - *Paper*
    - *Ready, set, SCIENCE!*, Ch 8, A system that supports science learning
- Activity Development
  - Modify your activity to be more inclusive of diverse learners.