

Teaching Science as Inquiry (TSI) Discipline & Demeanors

A Discipline is...

- A community of persons
- An expression of human imagination and ingenuity
- A mode of inquiring about the world
- A tradition
- A conceptual structure
- A specialized language or other system of symbols
- A heritage of literature and artifacts and networks of communication
- A system of values and demeanors
- An instructive community

Demeanors and values of scientific disciplinarians:

- Responsibility
- Courtesy
- Skepticism
- Respect for ideas of others
- Accuracy
- Honesty
- Open mindedness
- Evidence-based evaluation

Teaching Science as Inquiry (TSI) Practices of Science & Demeanors

Practices of Science:

Things you actually do when doing science = verbs

- *Asking* questions
- *Making* observations
- *Devising* a testable hypothesis
- *Collecting, analyzing, and interpreting* data
- *Constructing and critiquing* arguments
- *Communicating*

Demeanors:

Adverbs to the practice verbs

- Responsibly
- Courteously
- Skeptically
- Respectfully
- Accurately
- Honestly
- Open-mindedly
- Evidentially

Example Sentences:

- I am honestly *communicating the results* of my analysis.
- We are accurately *collecting data* by measuring sharks with our meter ruler.
- I am open-mindedly *asking questions* about the commercial for Slim-quick I observed this morning.