Shared Vocabulary Guide for Cross-Disciplinary Communication

Bridging Science & Arts

This guide provides essential terminology and frameworks to facilitate meaningful collaboration between scientists and artists across disciplines. Creating a common language is crucial for successful cross-disciplinary partnerships that honor both artistic vision and scientific integrity, whether working in visual arts, performance, music, literature, or other creative fields.

Communication Strategies

- Begin meetings by defining terms that might have different meanings across disciplines
- When encountering unfamiliar terminology:
  - "When you use the term [X], I understand it to mean [Y]. Is that how you're using it?"
- "What aspects of this topic do you find most compelling or important to communicate?"
- Create visual diagrams that map relationships between concepts
- Schedule regular check-ins to ensure continued shared understanding

Shared Project Vocabulary

Creating a common vocabulary is essential for cross-disciplinary work. Visual representations can help map relationships between concepts from different fields and ensure all team members share the same understanding.

Collaboration Structures

- Residency: Extended period where artists work within scientific or environmental organizations
- Workshop Series: Sequential sessions building toward exhibition, performance, or community engagement
- Field Explorations: Guided experiences combining site tours with creative response
- Educational Integration: Courses or programs combining arts and sciences with public outcomes
- Consultancy: Short-term engagement where artists are hired to interpret or communicate scientific findings, or scientists are brought in to inform artistic projects with technical expertise

Engagement Goals

Community Activation

Inspiring participants to take action based on scientific information

Cross-Pollination

Mutual exchange of ideas and methods across disciplines

Affective Response

Emotional or sensory engagement with scientific concepts

Place-Based Knowledge

Understanding derived from direct experience with specific locations

Didactic Learning

Teaching scientific concepts through artistic media, where the creative work serves as the vehicle for understanding complex information

Comparing Artistic Process & Scientific Method

Scientific Method	Artistic Process	Shared Elements
Observation: Noticing phenomena in the world	Inspiration: Finding creative stimulus in experiences or ideas	Both begin with attentive observation and curiosity
Question: Formulating specific inquiry	Conceptualization: Developing thematic focus or creative problem	Both establish parameters for exploration
Hypothesis: Proposing potential explanation	Ideation: Generating possible approaches or elements	Both involve speculative thinking about possibilities
Experimentation: Testing hypothesis under controlled conditions	Exploration/Improvisation: Trying various approaches or materials	Both require active testing and hands-on work
Data Collection: Gathering measurable results	Documentation: Recording process, drafts, and iterations	Both value preserving information about process
Analysis: Interpreting data patterns	Critique/Reflection: Evaluating what works and what doesn't	Both involve critical assessment of results
Conclusion: Determining if hypothesis is supported	Refinement: Making final artistic choices	Both require synthesis of findings
Peer Review: Evaluation by scientific community	Public Presentation: Sharing work with audiences	Both seek external validation and response
Publication: Sharing results with wider community	Exhibition/Performance: Presenting finished work	Both culminate in public dissemination
Replication: Others verify by reproducing experiment	Interpretation: Others engage with and respond to the work	Both involve ongoing response from community