Socratic Dialogue Capacity Assessment Metrics

Core Competency Areas

1.Question Formulation Skills

Metric	Observable Behaviors	Measurement Method	Proficiency Levels
Question Depth	Moves from surface to deeper inquiry	Count of question levels (what→why→how→what if)	Novice: 1-2 levels Intermediate: 3-4 levels Advanced: 5+ levels
Question Types	Uses varied question categories	Categorize questions (clarification, assumption, evidence, implication, perspective)	Novice: 1-2 types Intermediate: 3-4 types Advanced: All 5 types
Question Timing	Asks follow-up questions appropriately	Ratio of follow-up to initial questions	Low: <0.3 Moderate: 0.3-0.7 High: >0.7
Question Precision	Formulates clear, focused questions	Rating scale (1-5) for clarity and specificity	Poor: 1-2 Good: 3-4 Excellent: 5

2.Response Quality to Inquiry

Metric	Observable Behaviors	Measurement Method	Proficiency Levels
Thoughtful Engagement	Pauses to consider before responding	Average response time and quality correlation	Reactive: <3 sec Reflective: 3-10 sec Deep: >10 sec
Answer Completeness	Addresses all parts of complex questions	Percentage of the question components addressed	Partial: <60% Adequate: 60-85% Complete: >85%
Evidence Integration	Supports responses with reasoning/examples	Count of evidence pieces per response	Low: 0-1 Moderate: 2-3 High: 4+

Metric	Observable Behaviors	Measurement Method	Proficiency Levels
Uncertainty Acknowledgment	Expresses appropriate doubt/confidence	Frequency of "I don't know" or qualifying statements	Rare: <10% Appropriate: 10-25% Frequent: >25%

3.Critical Thinking Depth

Metric	Observable Behaviors	Measurement Method	Proficiency Levels
Assumption Recognition	Identifies unstated assumptions	Count of assumptions surfaced per discussion	Novice: 0-2 Intermediate: 3-5 Advanced: 6+

Metric	Observable Behaviors	Measurement Method	Proficiency Levels
Logical Reasoning	Follows logical connections	Assessment of argument structure validity	Weak: Frequent gaps Moderate: Some gaps Strong: Consistent logic
Contradiction Detection	Notices inconsistencies in reasoning	Number of contradictions identified	Low: 0-1 Moderate: 2-3 High: 4+
Complexity Tolerance	Engages with nuanced, multi-faceted issues	Comfort level with ambiguous topics (1-5 scale)	Uncomfortable: 1-2 Tolerant: 3-4 Embracing: 5

4.Intellectual Humility

Metric	Observable Behaviors	Measurement Method	Proficiency Levels
Position Flexibility	Willingness to revise views	Frequency of position changes with new evidence	Rigid: 0% Flexible: 10-30% Adaptive: >30%
Curiosity Expression	Shows genuine interest in understanding	Count of genuine inquiry vs. argumentative questions	Low: <50% Moderate: 50-75% High: >75%

Metric	Observable Behaviors	Measurement Method	Proficiency Levels
Mistake Acknowledgment	Admits errors in reasoning	Frequency of error recognition and correction	Rare: <5% Occasional: 5-15% Regular: >15%
Learning Orientation	Focuses on understanding vs. winning	Ratio of learning-focused vs. competitive statements	Competitive: <40% Balanced: 40-70% Learning: >70%

5.Metacognitive Awareness

Metric	Observable Behaviors	Measurement Method	Proficiency Levels
Thinking About Thinking	Comments on own thought processes	Frequency of metacognitive statements	Low: <3 per session Moderate: 3-7 High: >7
Strategy Awareness	Recognizes and adjusts inquiry approach	Instances of strategy modification	Unaware: 0 Emerging: 1-2 Conscious: 3+
Bias Recognition	Identifies own cognitive biases	Self-reported bias acknowledgments	Rare: 0-1 Occasional: 2-3 Regular: 4+
Reflection Quality	Synthesizes insights from dialogue	Depth of summary/ reflection statements (1-5 scale)	Surface: 1-2 Moderate: 3-4 Deep: 5

Assessment Framework

Scoring Method

- **Individual Metrics**: Rate each behavior on the specified scale
- **Competency Areas**: Average scores within each area
- **Overall Capacity**: Weighted average across all areas
- **Growth Tracking**: Compare scores over multiple sessions

Data Collection Methods

1. **Direct Observation**: Live scoring during dialogue sessions
2. **Audio/Video Analysis**: Post-session detailed coding
3. **Self-Assessment**: Participant reflection surveys
4. **Peer Assessment**: Cross-evaluation in group settings
5. **Portfolio Review**: Analysis of written reflections/questions

Proficiency Interpretation

Overall Score Range	Capacity Level	Description
1.0 - 2.0	**Novice**	Beginning to engage with basic inquiry concepts
2.1 - 3.0	**Developing**	Shows emerging skills across multiple areas
3.1 - 4.0	**Proficient**	Demonstrates consistent competency in most areas
4.1 - 5.0	**Advanced**	Exhibits sophisticated Socratic dialogue skills

Usage Notes

- Assess in authentic dialogue contexts, not artificial testing scenarios
- Allow for cultural and individual communication style variations
- Focus on growth patterns rather than absolute scores
- Consider domain expertise when evaluating evidence integration
- Use multiple assessment occasions for reliable measurement