GEO 309 – Intro to GIS

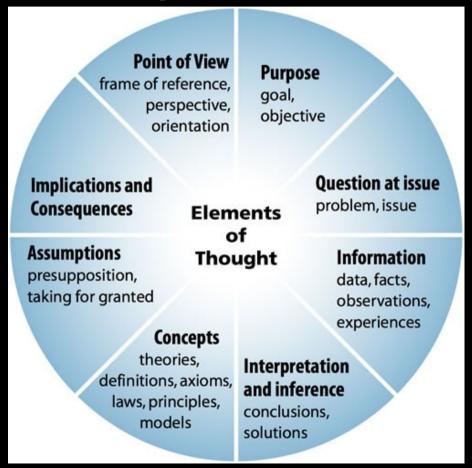
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Topics

- Final Project Rubric Review
- Map Review
- Map Extent
- Time for Articles

Final Project – Rubric Review

- Process of checking your map prior to publication
 - Use your Structured & Analytical Thinking Tools
 - Elements and Trait
 - Peer Review
 - Sanity Checks



Source: Analytic Thinking by The Foundation for Critical Thinking

Intellectual Standards Are Used to Assess Thinking

Clarity

Could you elaborate further? Could you give me an example? Could you illustrate what you mean?

Accuracy

How could we check on that? How could we find out if that is true? How could we verify or test that?

Precision

Could you be more specific?
Could you give me more details?
Could you be more exact?

Relevance

How does that relate to the problem? How does that bear on the question? How does that help us with the issue?

Depth

What factors make this a difficult problem?
What are some of the complexities of this question?
What are some of the difficulties we need to deal with?

Breadth

Do we need to look at this from another perspective? Do we need to consider another point of view? Do we need to look at this in other ways?

Logic

Does all this make sense together? Does your first paragraph fit in with your last? Does what you say follow from the evidence?

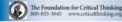
Significance

Is this the most important problem to consider? Is this the central idea to focus on? Which of these facts are most important?

Fairness

Do I have any vested interest in this issue?

Am I sympathetically representing the viewpoints of others?



Critical Thinkers Routinely Apply Intellectual Standards To The Elements Of Reasoning In Order To Develop Intellectual Traits

THE STANDARDS

Clarity Accuracy Relevance Logicalness Precision
Significance
Completeness
Fairness

Breadth Depth

Must be applied to

THE ELEMENTS

As we learn to develop Purposes Questions Points of view

Inferences Concepts

Points of view Implications
Information Assumptions

INTELLECTUAL TRAITS

Intellectual Humility Intellectual Autonomy Intellectual Integrity Intellectual Courage

Intellectual Perseverance Confidence in Reason Intellectual Empathy Fairmindedness Source:
Analytic
Thinking by
The
Foundation
for Critical
Thinking

Map Review – Analytic Thinking

- Problem Restatement
- Pros/Cons/Fixes
- Divergent/Convergent
- Sorting & Time Lines
- Causal Flow Diagram
- Matrix
- Decision Tree

- Weighted Ranking
- Hypothesis Testing
- Devil's Advocate
- Probability Tree
- Utility Tree
- Utility Matrix
- Advanced Utility Analysis

- Peer Review
 - Colleagues
 - Other GIS Professionals
 - Both Junior and Senior level
 - Non-expert Opinion
 - Subject
 - Cartography

- Peer Review
 - Walk them through a map analysis
 - Observations
 - Assessments
 - Don't ask leading questions
 - Let them ask all the questions
 - They will help you build a better map

- Sanity Check
 - Does the map make sense?
 - Map elements
 - Design
 - Accessibility
 - Medium
 - Audience
 - Domain-specific information/application

- Remember
 - You are often going to be the "map expert"
 - You are responsible for the map
 - Your map will have an effect
 - People will _____ your map
 - Use
 - Critique
 - Misuse
 - Figure out "all the issues" before you deploy your map