

Beyond Bird Units

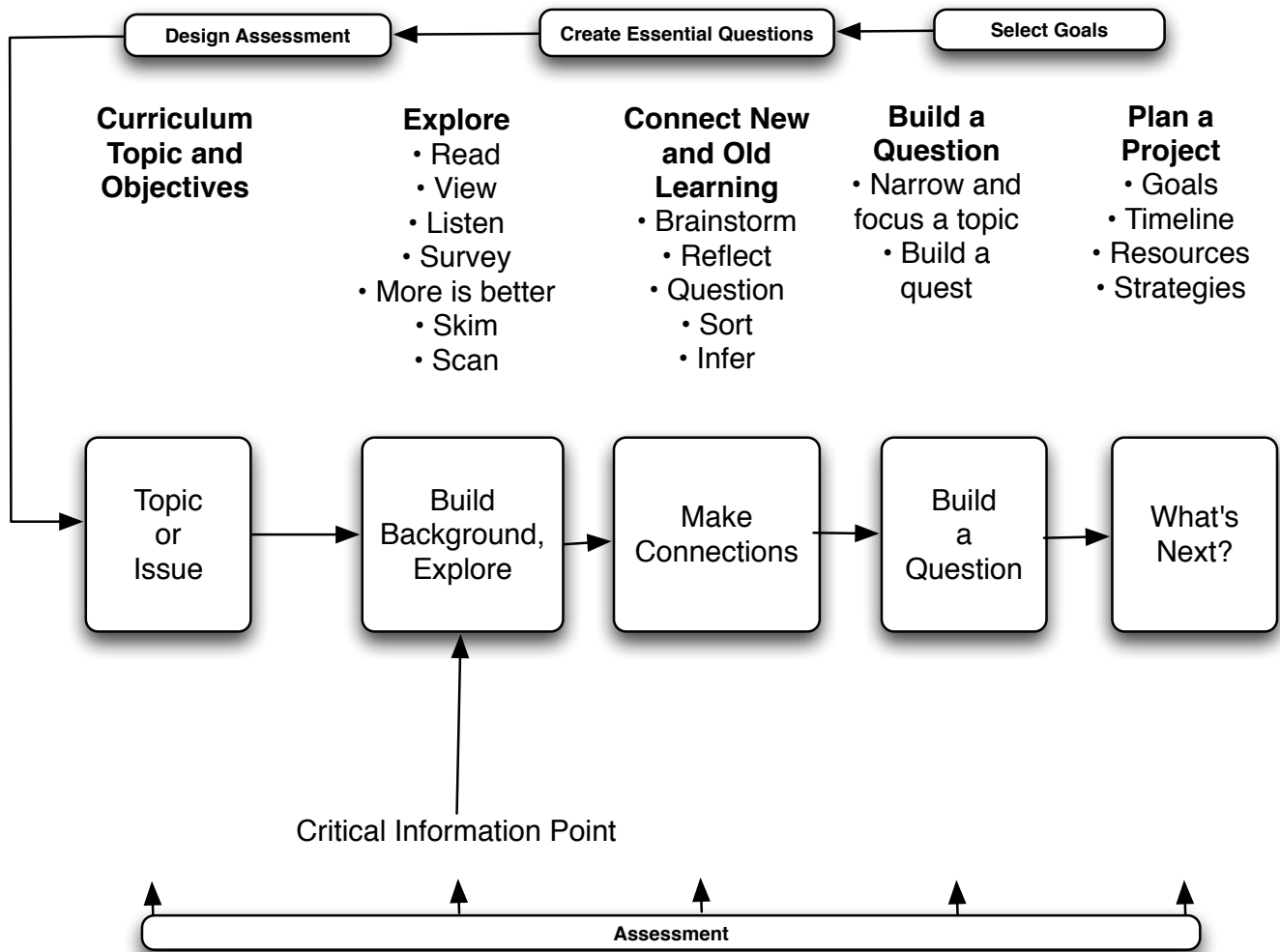
18 Models for Teaching and Learning in Information-Rich and Technology-Rich Environments

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Think Model #1: Background to Question



Why This Model?

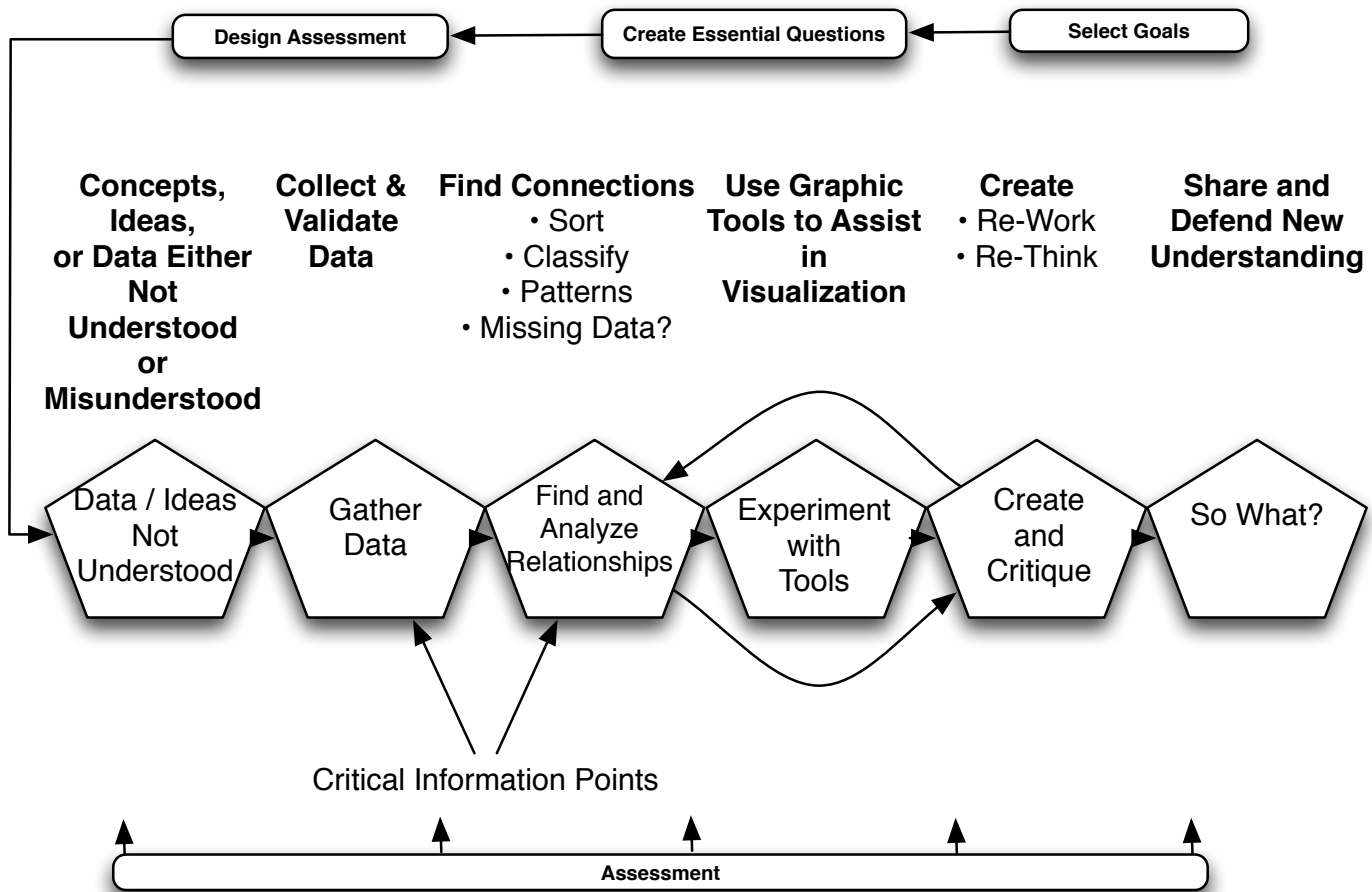
- Capture the learner's interest
- Build a basic vocabulary of the topic
- Compensate for uneven prior knowledge
- Use when prior knowledge is skimpy
- Help learners build engaging questions when they seem to lack interest
- Provide an opportunity for a "topic to select a learner"
- Use when the textbook is insufficient
- Help learners narrow a topic when struggling with generalities
- Turn a library orientation into an exploration

Possible Topics:

- Environmental issues
- Genetics
- Health and safety issues
- Political ideologies
- Types of music
- Science fair projects
- Pet care and needs
- Media influence on behavior
- Marine biology
- Rain forests
- Middle Ages
- Middle East
- Early settlers
- Ecosystems

☆ **Life Skill: The more you know, the better questions you ask.** ☆

Think Model #2: Sensemaking Visualizing / Re-Conceptualizing



Why This Model?

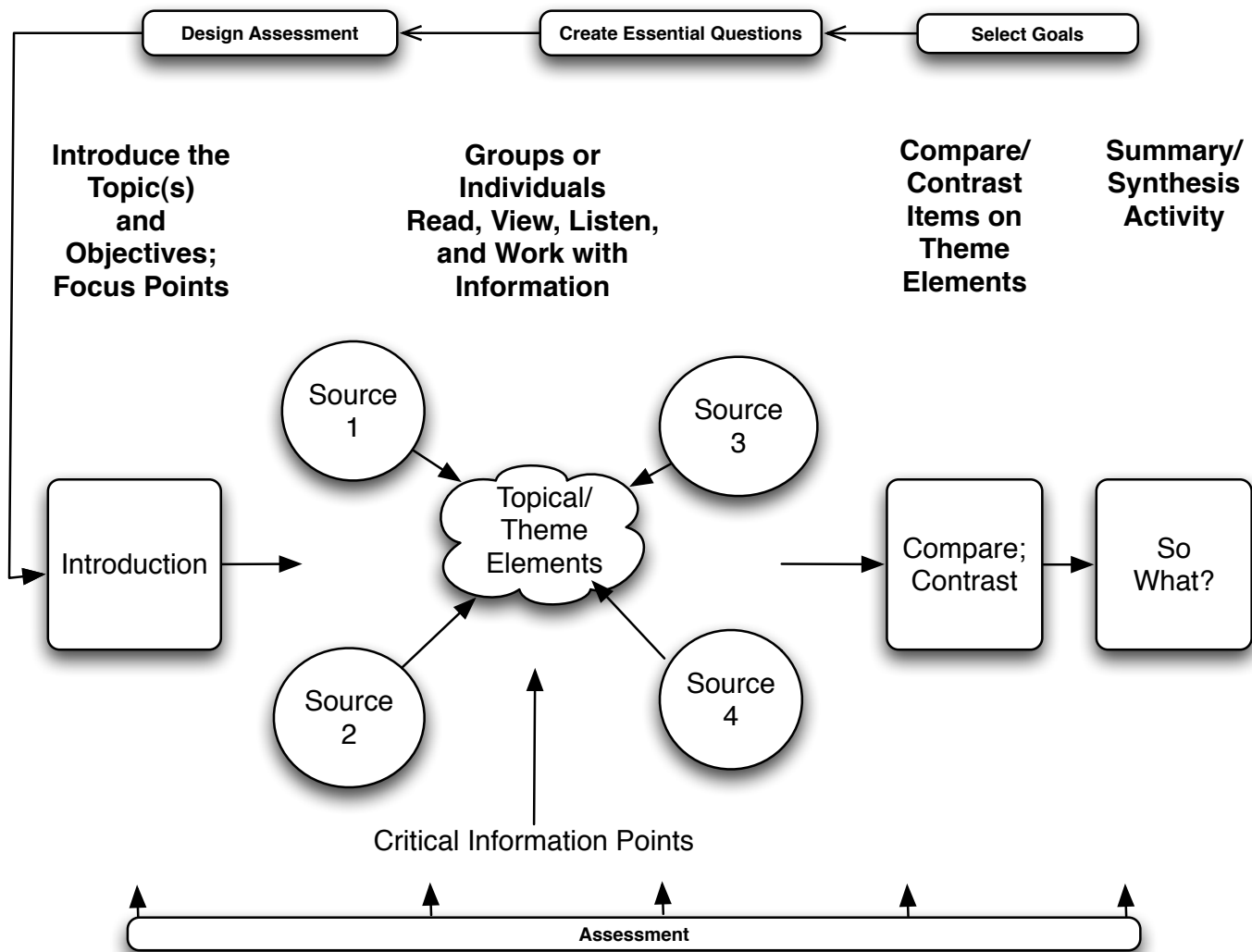
- Helps ESL and language limited Learners demonstrate understanding
- Take advantage of the adage that a picture is worth a thousand words
- Take advantage of learners who have high visualization abilities
- Add one more dimension to text and explanations
- Use when data cannot be understood in their raw form
- Try several visualizations of the same ideas
- Clarify concepts where misconceptions abound

Possible Topics:

- Popular misconceptions
- Data in any discipline
- Large amounts of data
- Population patterns
- All types of maps
- Ideas and their connections
- Cause / Effect
- Environmental / Social issues
- Difficult concepts

☆ **Life Skill: Visualizing information and data builds new perspectives.** ☆

Think Model #3: Read, View, Listen



Why This Model?

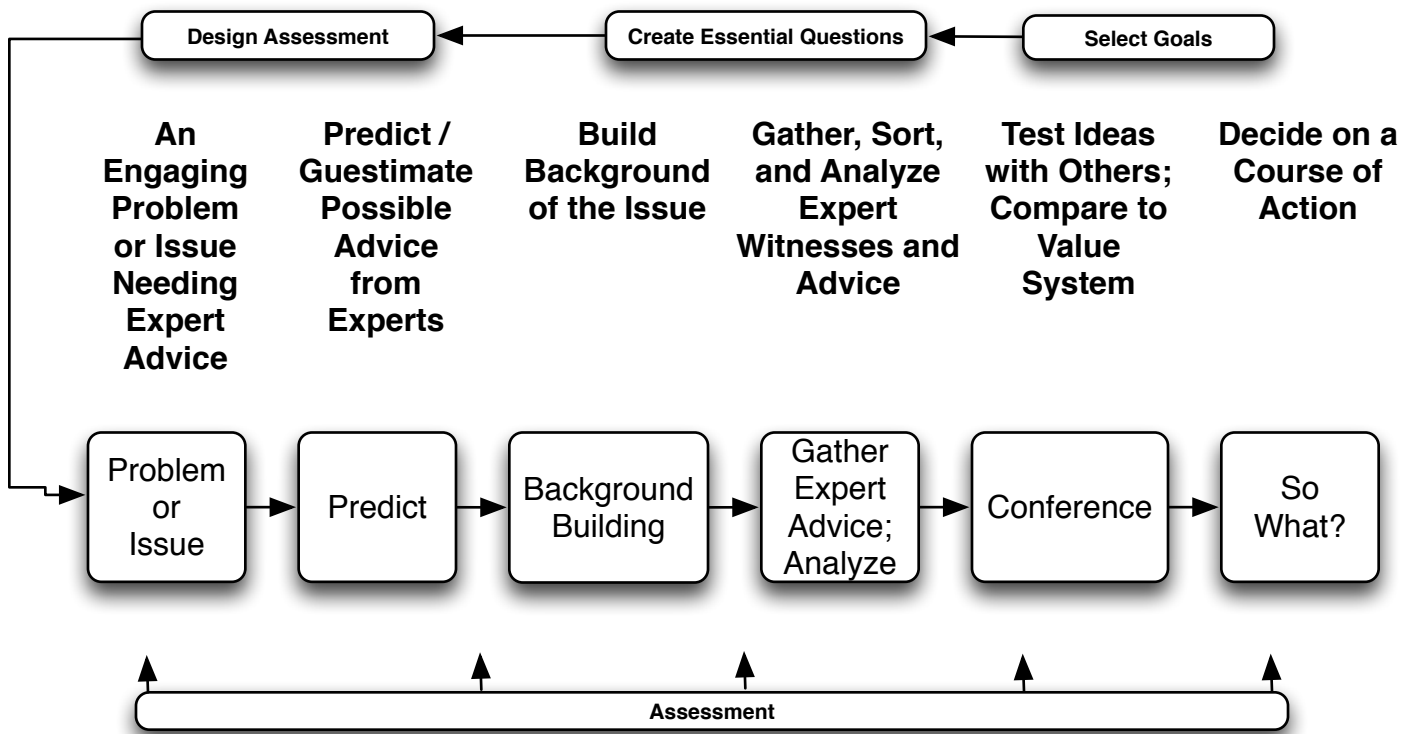
- Experience many literary/written works rather than a single text
- Allow all skill levels or backgrounds to concentrate on the theme rather than the difficulty of the text
- Concept map the big ideas across texts
- See big picture across cultures, authors, governments, time periods, ideas
- To compensate when you can't afford a textbook but have a library

Possible Topics:

- Literary themes across books
- Similar literary themes across cultures
- Causes of wars across combatants
- News reporting across international newspapers & TV
- Teen angst across teen novels
- Comparison of cultures around the world at the same time period
- Lives of rich and poor—same time, same locale

☆ **Life Skill: The more you "read" and think, the more you know.** ☆

Think Model #4: Advice to Action



Why This Model?

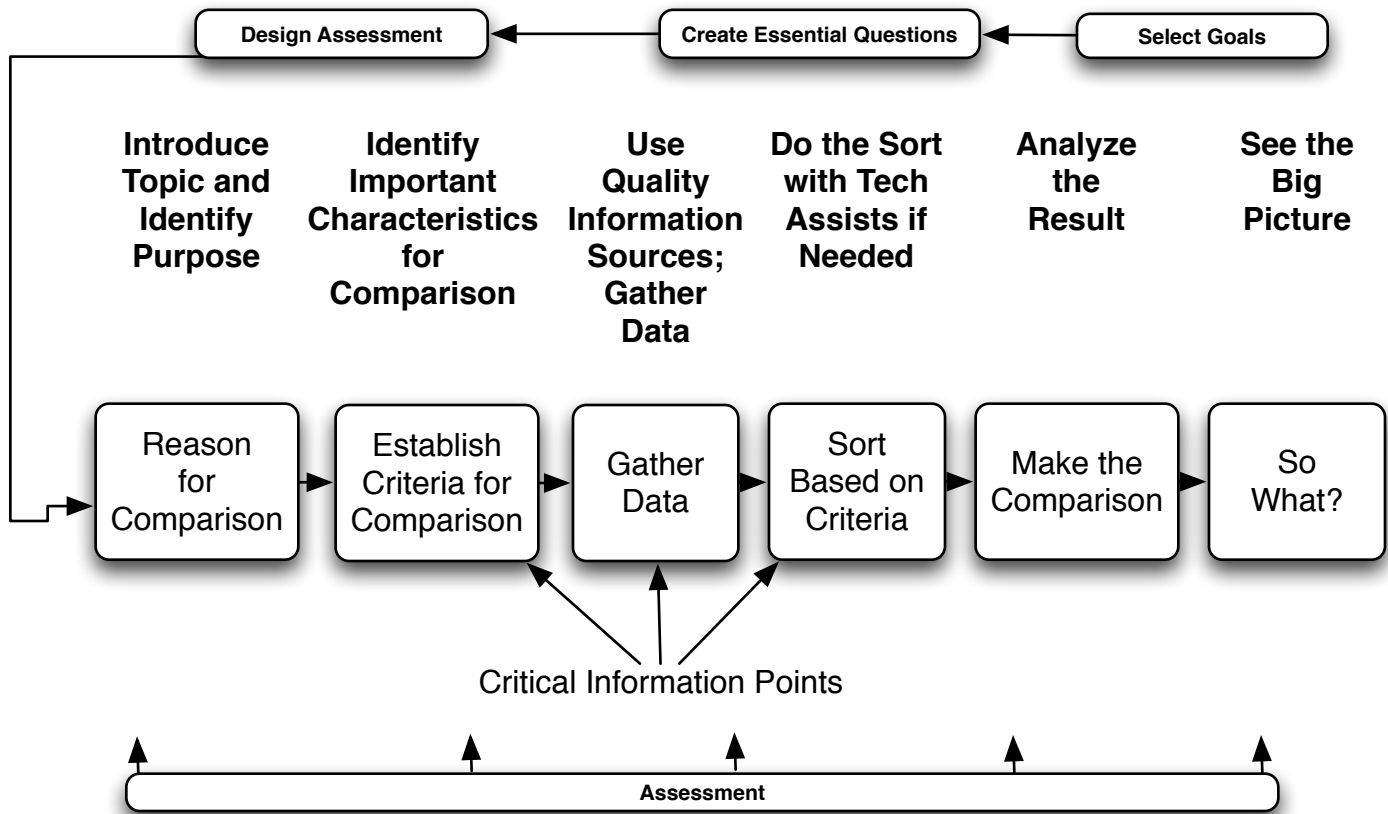
- To solve real problems
- Judge between good and poor advice
- Affect behavior—judging the difference between personal wishes and prudence
- Understand the consequences of taking advice
- To understand how historical events were shaped by advice both good and poor
- Make important life decisions

Possible Topics:

- Healthy lifestyles
- Selecting a college or career
- Succeeding in school
- Preventing, controlling forest fires
- Urban sprawl
- Safe drinking water
- Vending machines in schools
- School fundraising initiatives
- School safety issues
- Helping the homeless

☆ **Life Skill: Advice is plentiful. Good advice is rare.**
Knowing how to identify the best advice is priceless. ☆

Think Model #5: Compare and Contrast



Why This Model?

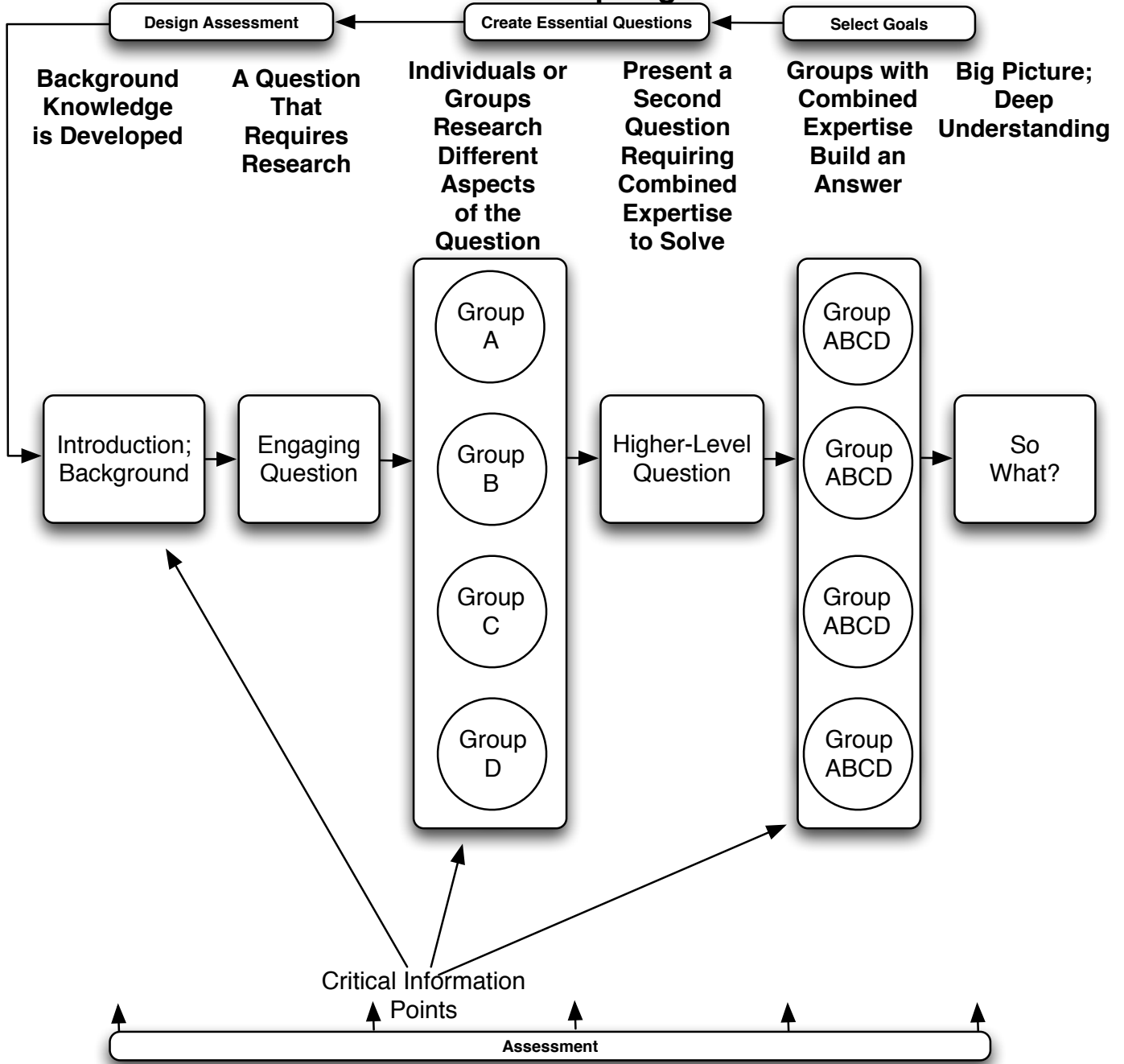
- Teach a much-researched and powerful teaching technique
- Stress quality information to achieve an accurate comparison
- Teach reason over subjectivity
- Ensures tough critical thinking
- Is the basis for sound decision making
- Provides the foundation for many other teaching techniques with large or small data sets, facts, or ideas

Possible Topics:

- Ideas
- Events
- Persons
- Cultures
- Governments
- Life skills
- Seasons
- Animals
- Plants
- Music
- Literature

☆ **Life Skill: Comparing and contrasting is the basis for sound judgement.** ☆

Think Model #6: Concept Jigsaw Puzzle



Why This Model?

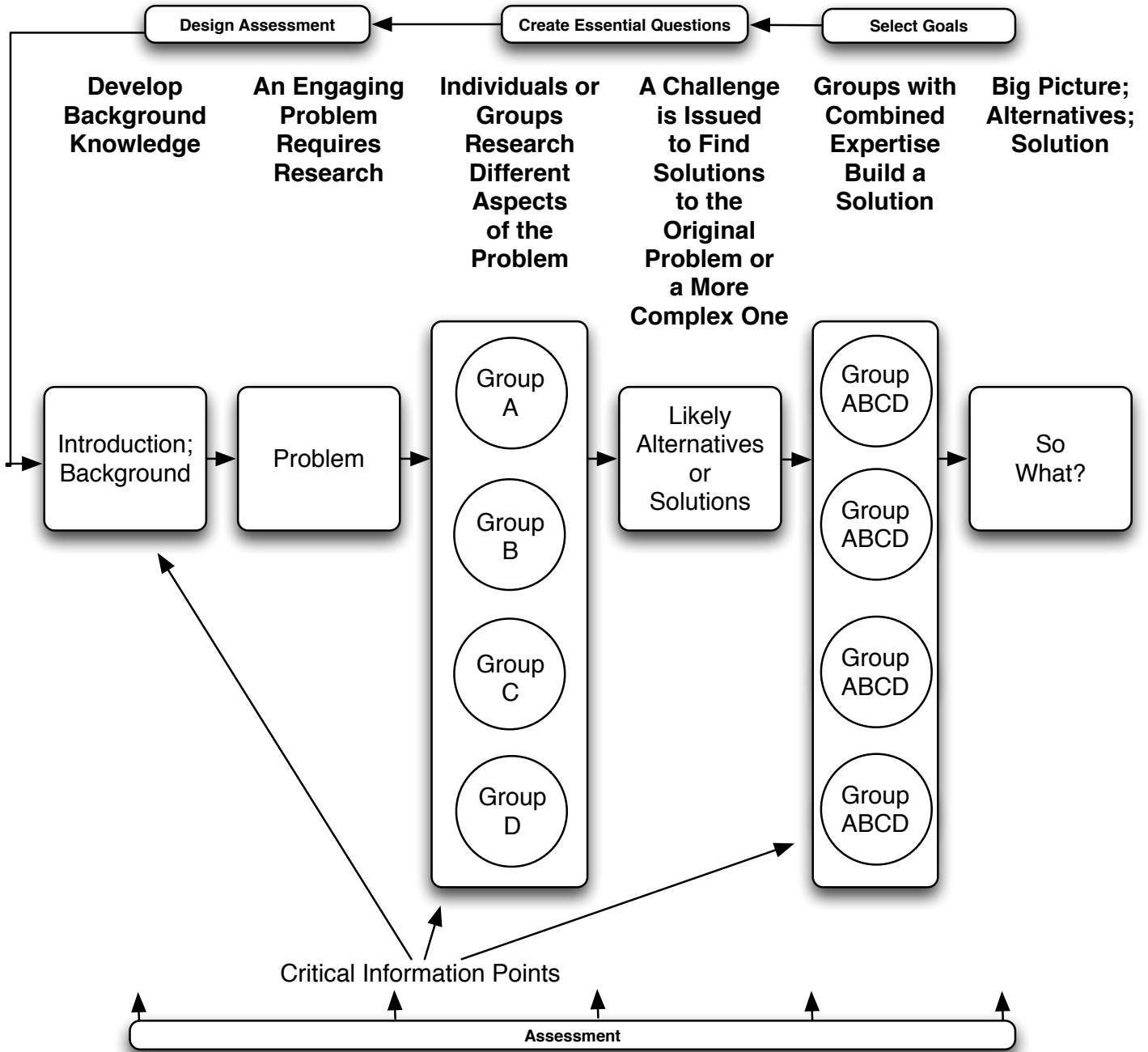
- Develop deep understanding rather than surface knowledge
- Develop group skills including interdependence and accountability
- Two heads are better than one
- Replicate a prototype of the real world of business and industry
- Stimulate each learner into making a contribution
- Use to introduce lots of material quickly
- Encourage divergent thinking

★ Life Skill: Questions are the key to understanding.★

Possible Topics:

- Persons
- Places
- Things
- Events
- Ideas
- Movements

Think Model #7: Problems/Possibilities Jigsaw Puzzle



Why This Model?

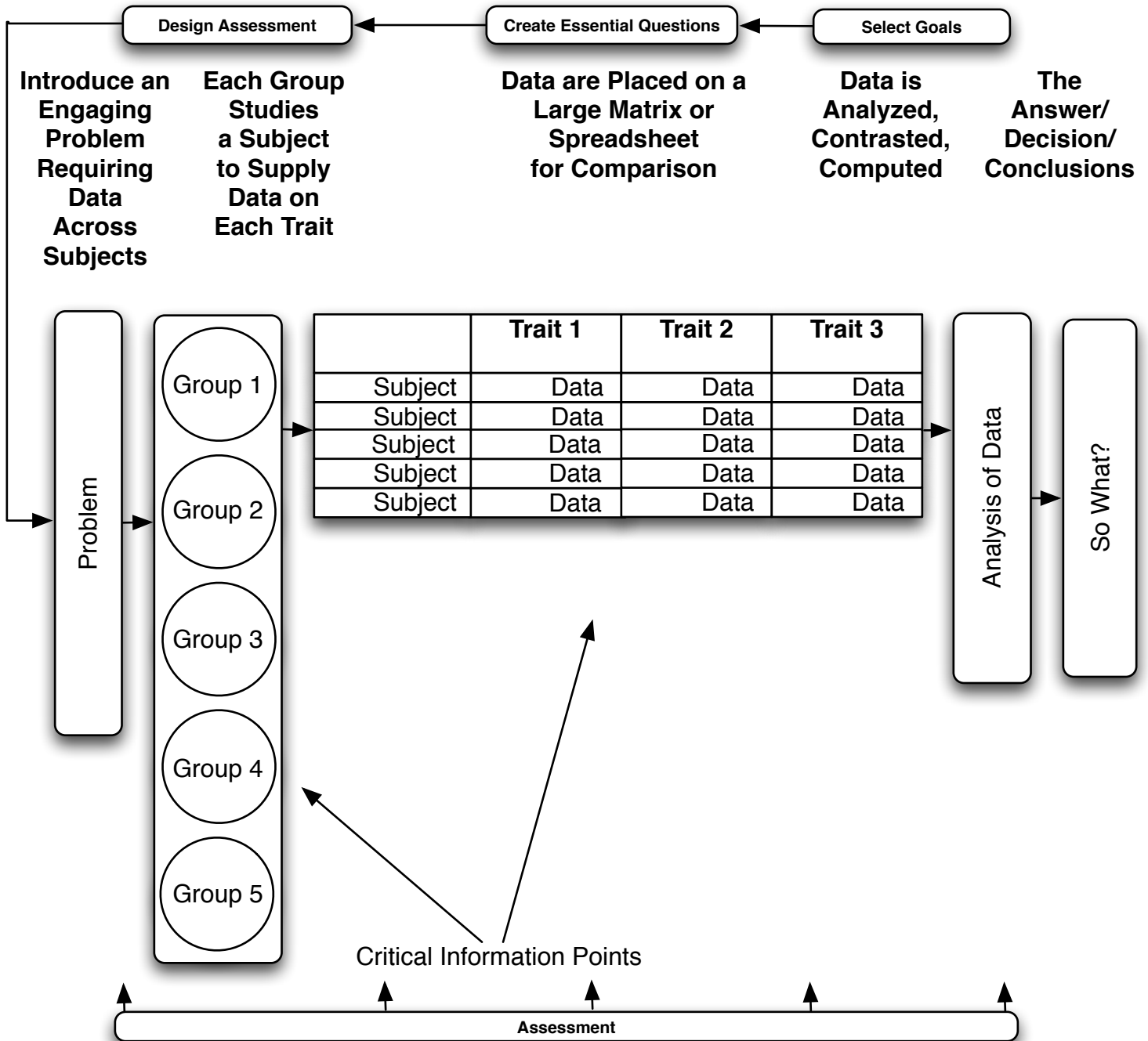
- Learn real world problem-solving skills
- Build group problem-solving skills
- Replicate a prototype of the real world of business and industry
- Stimulate each learner into making a contribution
- Encourage investigation, determination, and perseverance

Possible Topics:

- Problems encountered at home, school, community, nation
- Society problems such as poverty or health care
- Real problems created from learning experiences or projects

☆ **Life Skill: The more great ideas you have, the better the problem solving.** ☆

Think Model #8: Decision Matrix



Why This Model?

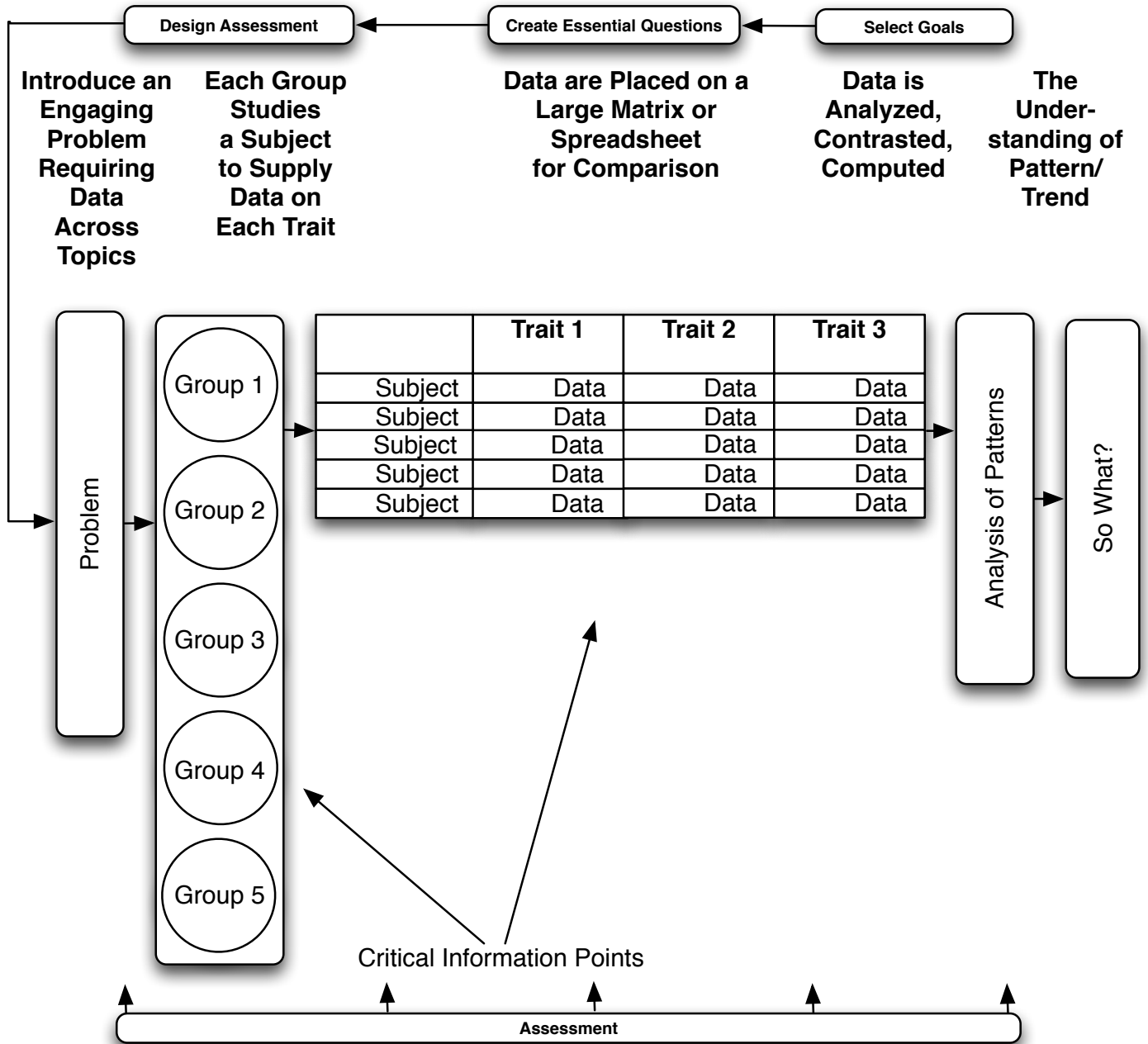
- Promote accurate data gathering
- Organize data for better decision making or understanding
- See the dangers of bad data in any cell
- Teach complex issues; solve complex problems

Possible Topics:

- Pick a pet for the classroom
- Are there weapons of mass destruction?
- Comparison of possible new highways
- Comparison of candidates for office

☆ **Life Skill: Informed decision making is a key to success.** ☆

Think Model #9: Patterns & Trends Matrix



Why This Model?

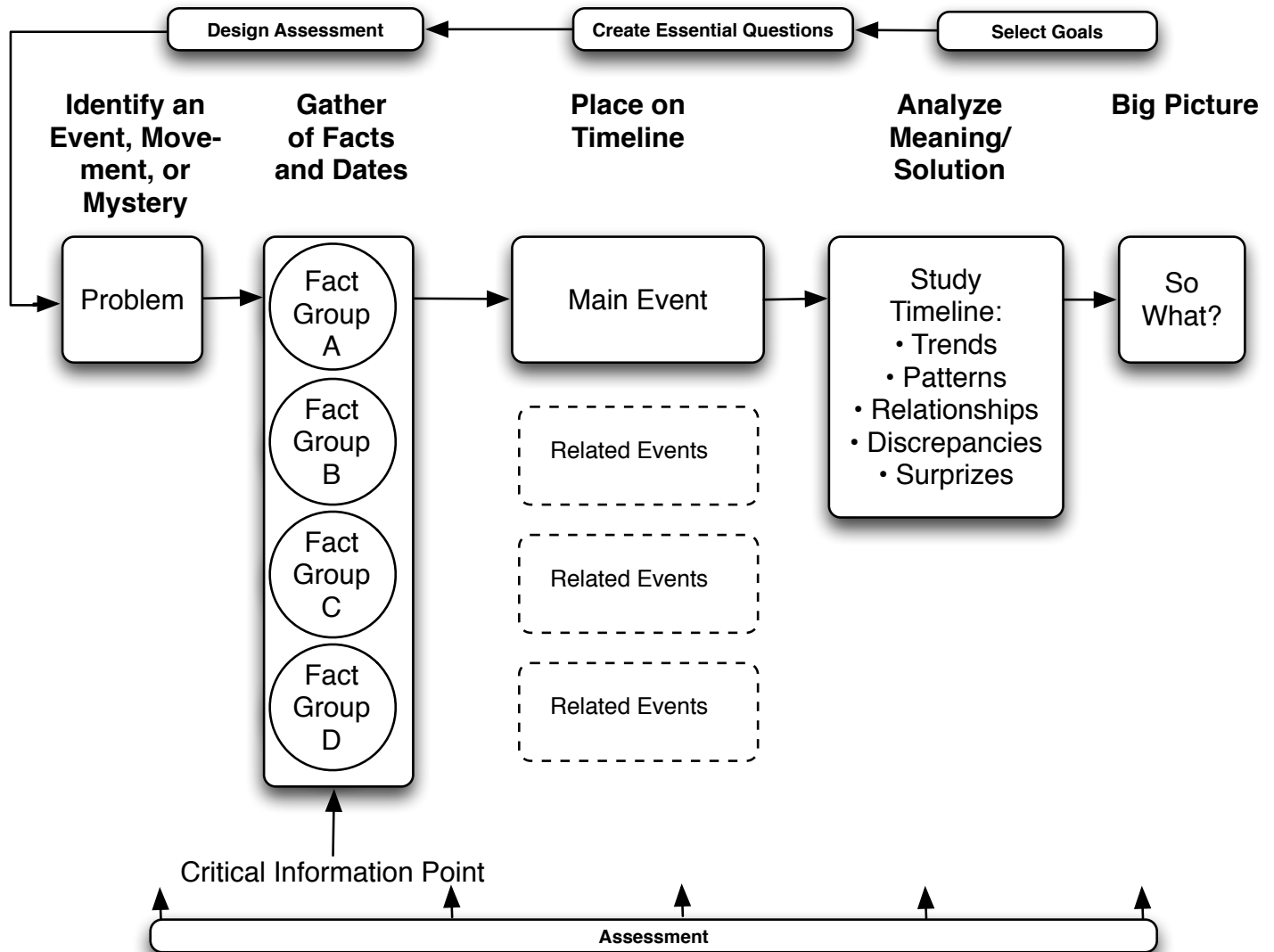
- Promote accurate data gathering
- Organize data for better understanding
- See the dangers of bad data in any cell
- Teach complex issues; solve complex problems
- Facilitate a look at patterns and trends
- Enable predictions

Possible Topics:

- Preparing for any major disaster
- Impact of eating habits
- Comparison of candidates for office
- What's happening in fashion
- Cultural trends
- Weather pattern changes
- Population patterns
- Organizational or governmental patterns

☆ **Life Skill: Discerning patterns helps you see both the forest and the trees and determining how to manage them.** ☆

Think Model #10: Timeline



Why This Model?

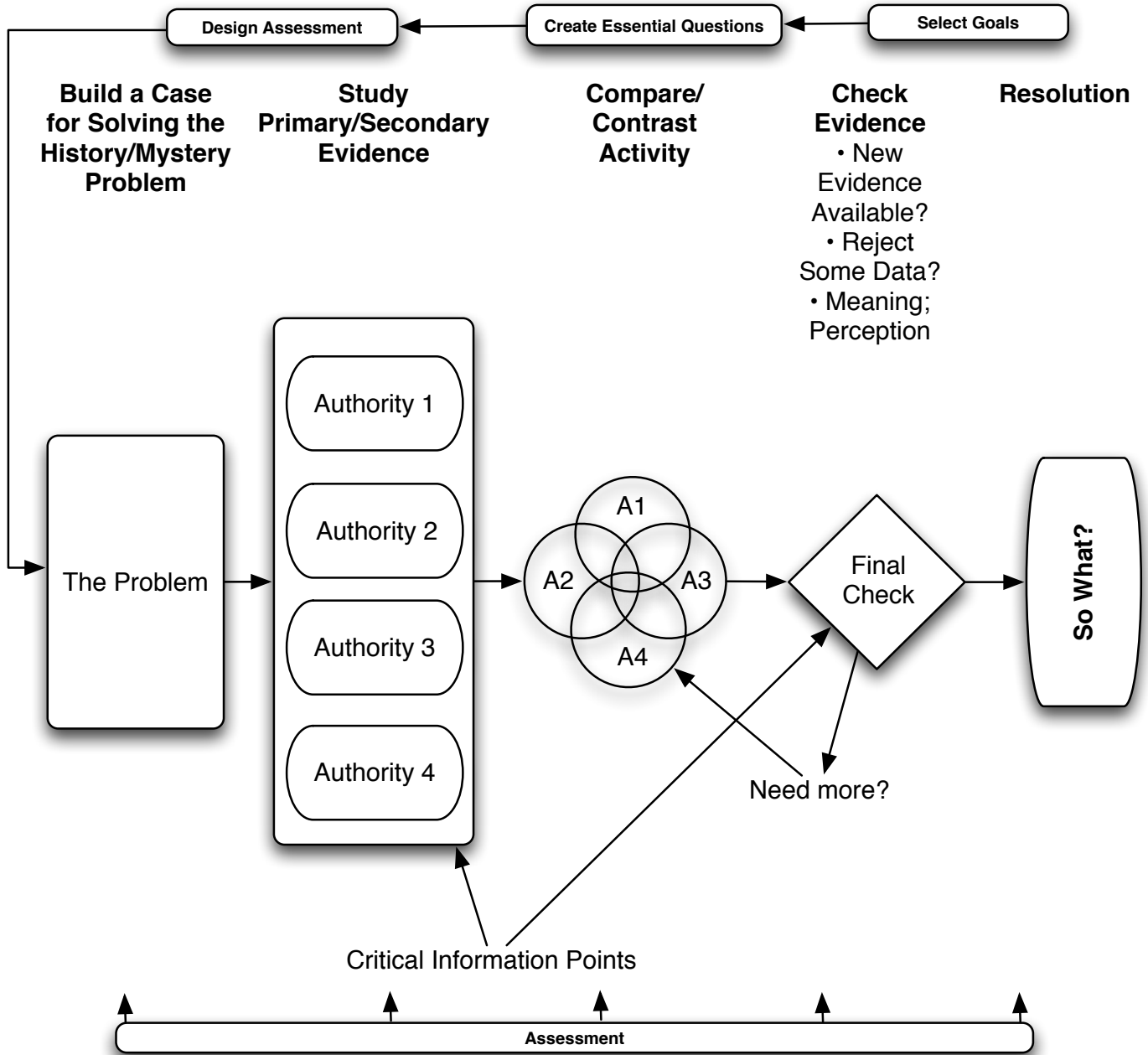
- Show changes over time
- Determine why something developed the way it did
- Understand how inaccurate information will distort the analysis of sequencing
- Make comparisons of the past and the present
- Put some events in a larger perspective
- Trace the background to explore cause and effect
- Understand sequence
- Visualize sequential patterns
- Identify trends
- Make connections between events and developments

Possible Topics:

- Chart a political election
- Study a catastrophic event
- Compare various disciplines during a time period
- Reconstruct the events of a crime or event
- Chart the Middle East conflict
- Study the rise of terrorism as warfare
- Chart the plot of a novel or story
- Study the structure of a symphony
- Put a a period of art into its environment
- Study what made landing on the moon possible
- Chart the immigration of a family to the U.S.

☆ **Life Skill: Sequencing is often the key to understanding.** ☆

Think Model #11: History & Mystery



Why This Model?

To Determine:

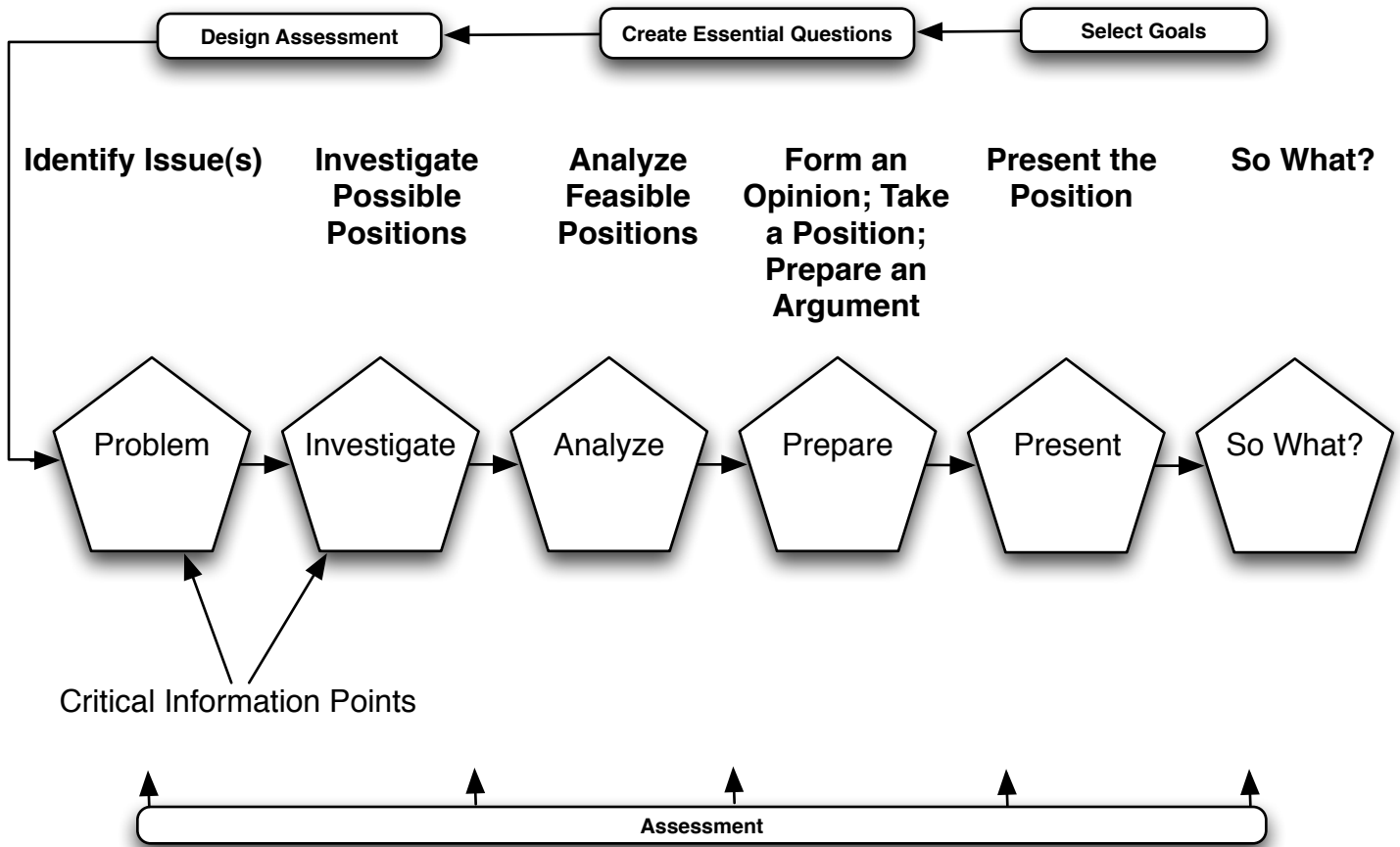
- When, where, and what appears to have happened?
- What really happened?
- Why did it happen?
- What could have prevented it from happening?
- What can we learn based on what happened and why?

Possible Topics

- Causes of war
- Change in government
- Natural catastrophes
- Advances in technology
- Influence of artists/authors
- Development of art forms and genres

☆ **Life Skill: Mistakes of the past need not be repeated.** ☆

Think Model #12: Take a Position



Why This Model?

- Learn to take positions on sound ideas rather than on snap judgments
- Learn how to understand ideas much different than your own
- Develop critical analysis skills in the face of propaganda
- Build empathy for all positions, even as you take a stand
- Learn to articulate and defend a position taken
- Build skills for living and participating in a democratic society
- Build strategies for successful relationships with family and friends

Sample Products:

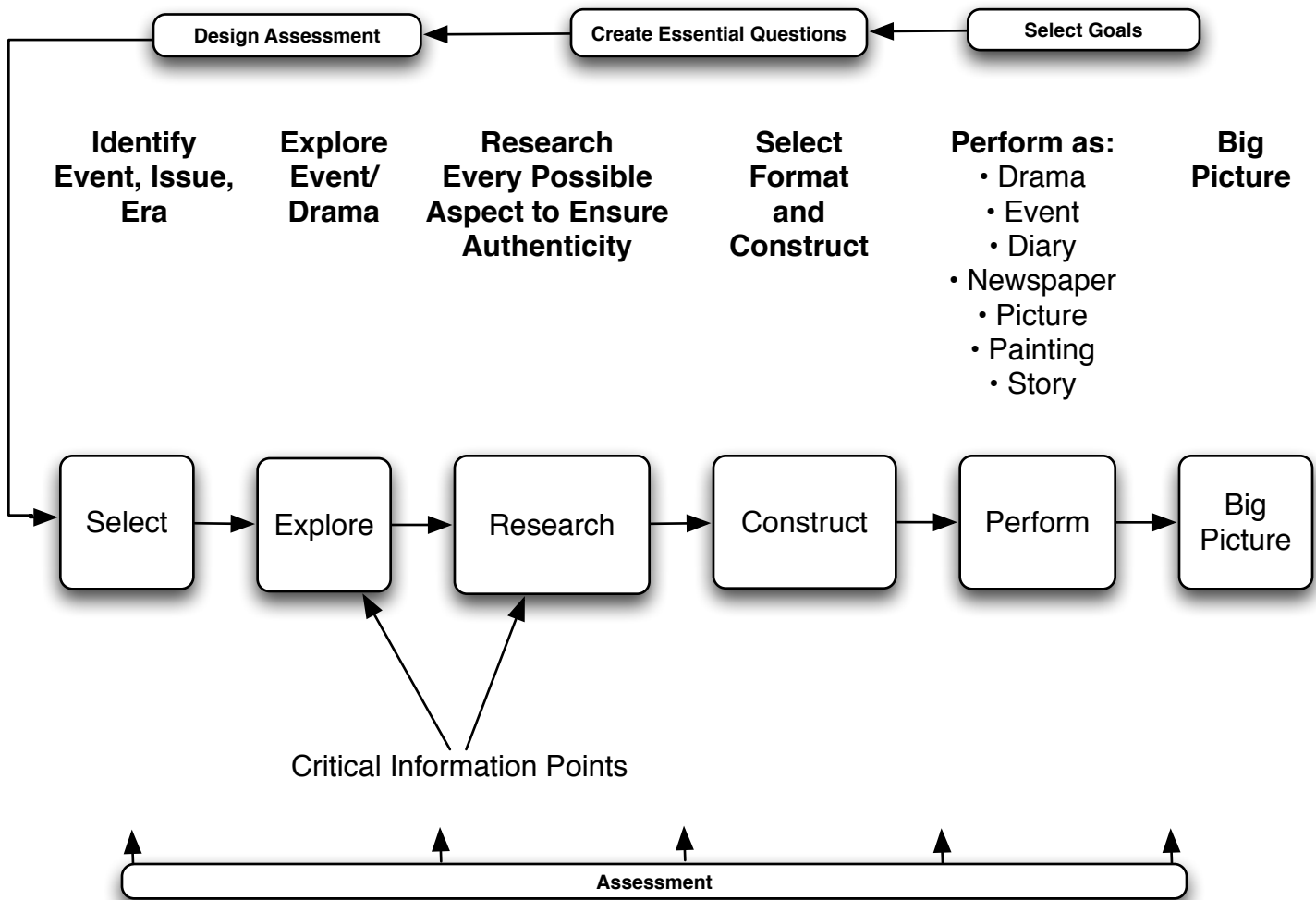
- Position paper
- Persuasive speech
- Video presentation
- PowerPoint presentation
 - Debate
 - Panel discussion
- Switch positions, then present
- Action plan

Sample Topics

- Political issues
- Controversial science problems
- Historical issues
- Moral issues
- Community problems
- School problems
- Literary critical issues

☆ **Life Skill: We build a stronger position with integrity when we know all the facts.** ☆

Think Model #13: Re-Create



Why This Model?

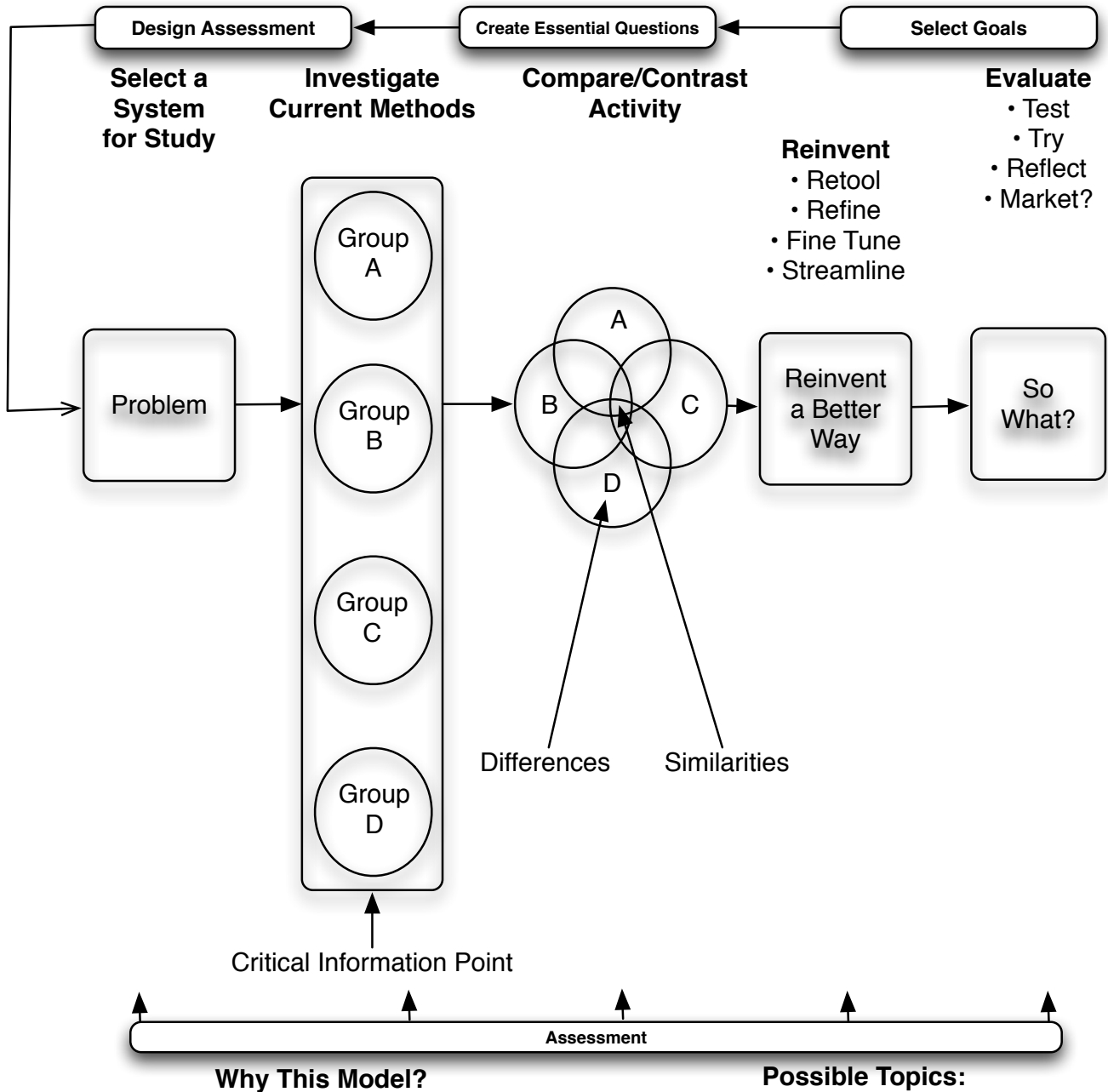
- Why things, seemingly strange, make sense in context
- Discover what kinds of persons contribute or distract while a major event is unfolding
- Learn from the unfolding of major events
- Demonstrate how excellence in the reconstruction of an event helps to understand that event
- Develop empathy for people in their time and place
- Walk in someone else's shoes
- Judge the difference between fiction and realistic fiction
- Enable self to text connections

Possible Topics:

- Life in a place/time
- Historical event
- Perform a play that requires authenticity
- Pioneer life
- Slavery
- Interview historical personality

☆ **Life Skill: It helps to walk a mile in someone else's moccasins.** ☆

Think Model #14: Reinventing a Better Way (Systems Analysis)

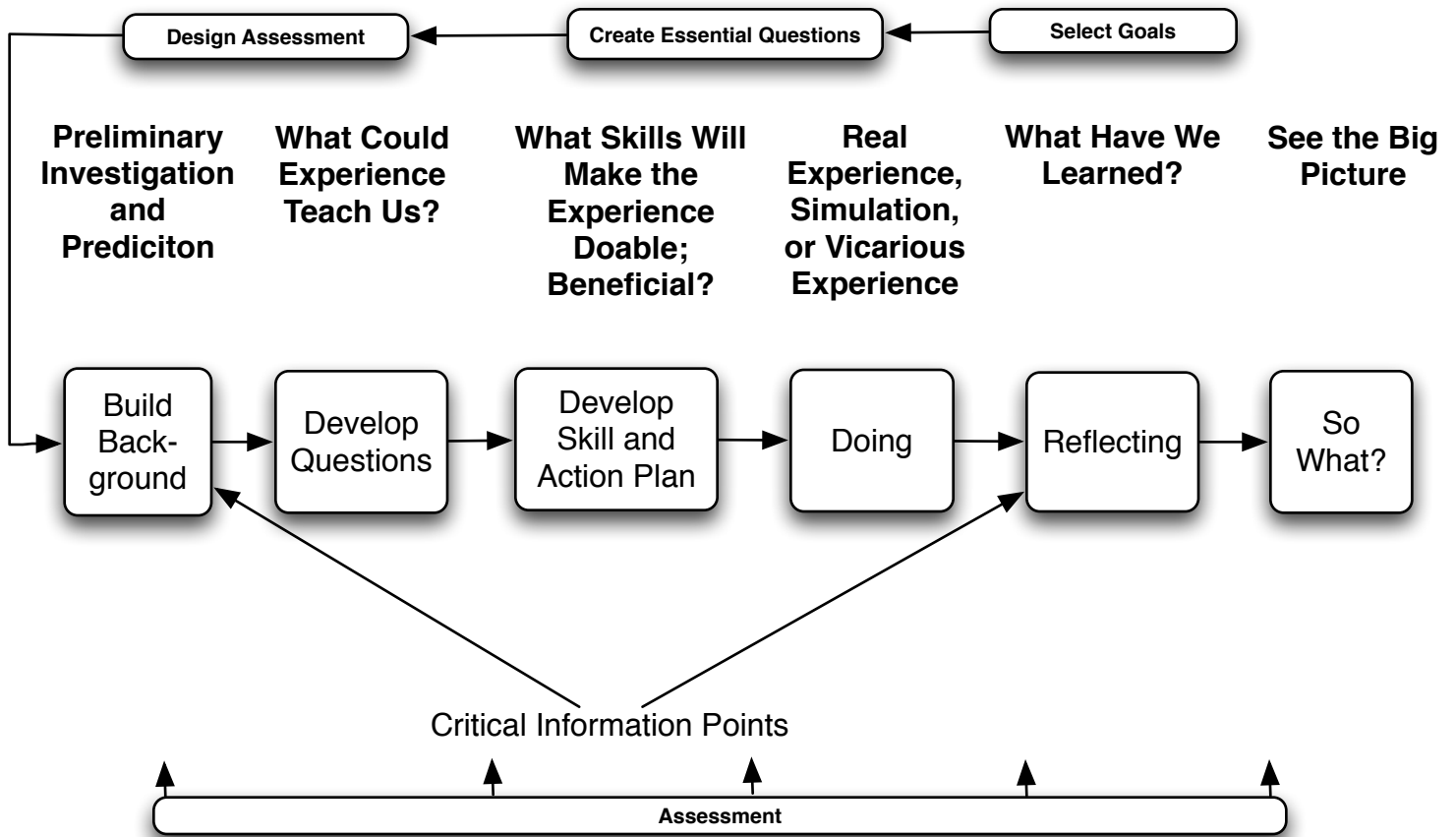


- Why This Model?**
- Improve the efficiency of our economy
 - Prepare for competitions (best ideas)
 - Re-create products, marketing plans and patents
 - Stimulate creativity
 - Simulate authentic problems
 - Build group work skills
 - Save time, money, natural resources, energy

- Possible Topics:**
- New ways to handle school problems
 - Living within a family's means
 - Ways to save money, time, effort
 - Create a labor-saving device
 - Solving a pesky real-life problem

☆ **Life Skill: Creativity and invention stimulate progress.** ☆

Think Model #15: Learn By Doing



Why This Model?

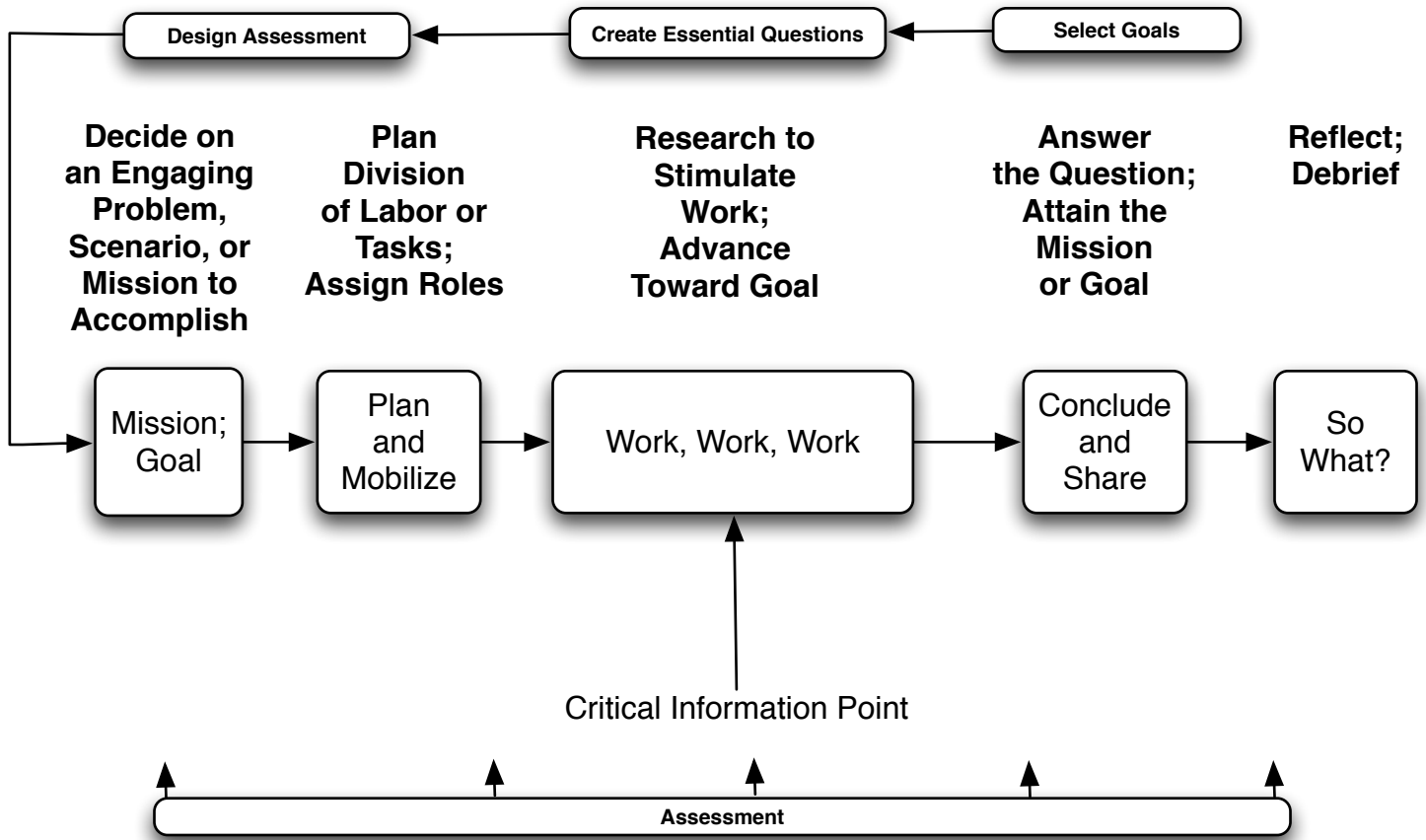
- Experience is often the best teacher
- Simulation and vicarious experience can substitute when real experiences are dangerous or unethical
- Expertise, local resources are available
- When learners need a dose of reality to spur understanding

Possible Topics:

- Scientific Experiments
- Field trips to local museums, industries, art galleries, or any other local organization where hands-on experiences are possible
- Service projects for school, community, state, nation, or world

☆ Life Skill: Experience is often the best teacher. ☆

Think Model #16: Teacher-Directed Quest (The Well-Designed Research, Experiment, or Project)



Why This Model?

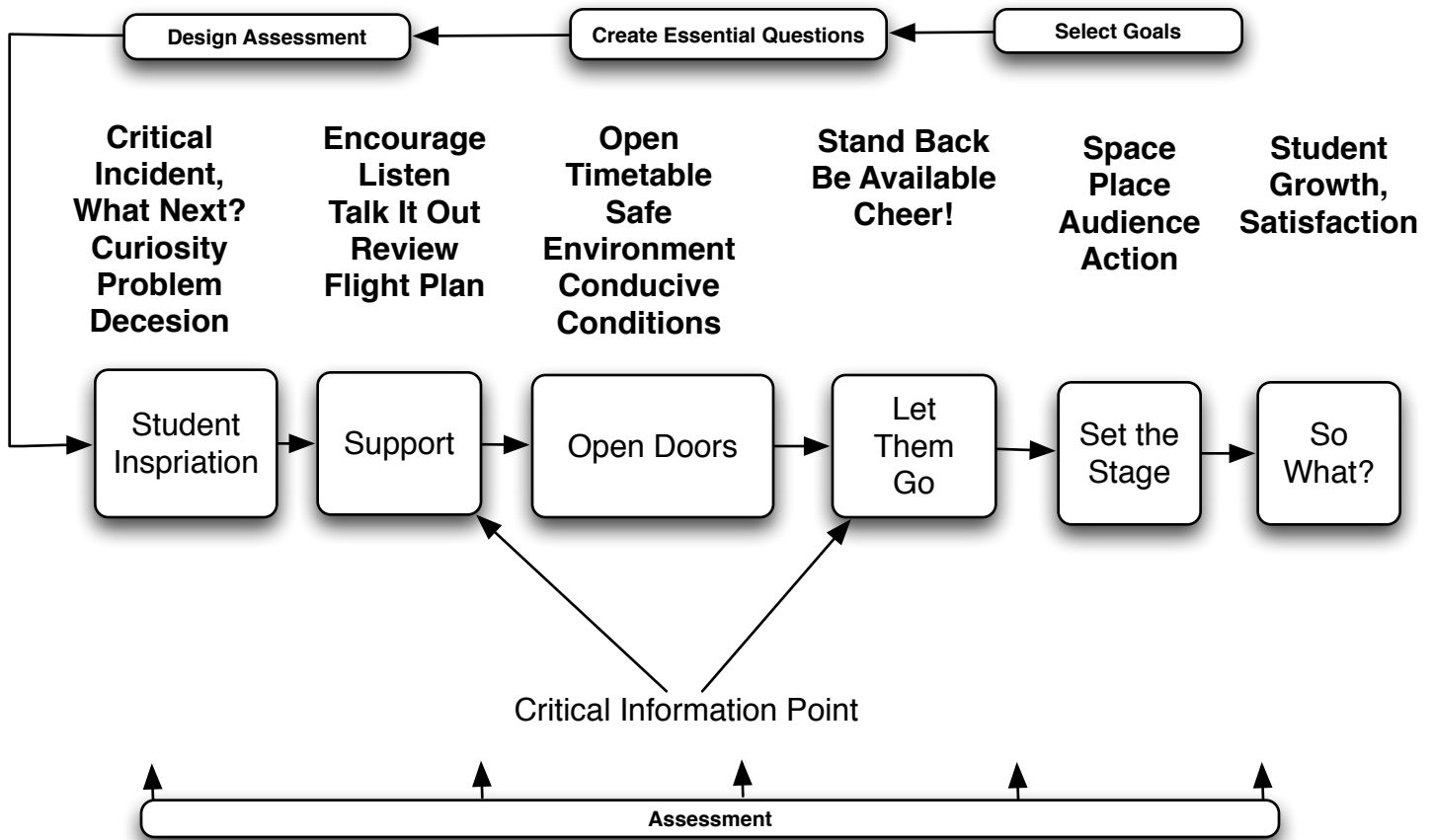
- Capture realism; Build expertise
- Build responsibility and independence
- Prepare for college or a profession
- Build a sense of achievement
- Capitalize on natural curiosities
- Make the curriculum relevant
- Develop deep understanding

Possible Projects:

- Formal research paper
- Web Quest
- I-Search paper
- Simulation game
- Scientific challenge/competition
- Senior paper
- Independent study
- Recital

☆ Life Skill: Research is the foundation of knowing and progress. ☆

Think Model #17: Learner-Directed Quest



Why This Model?

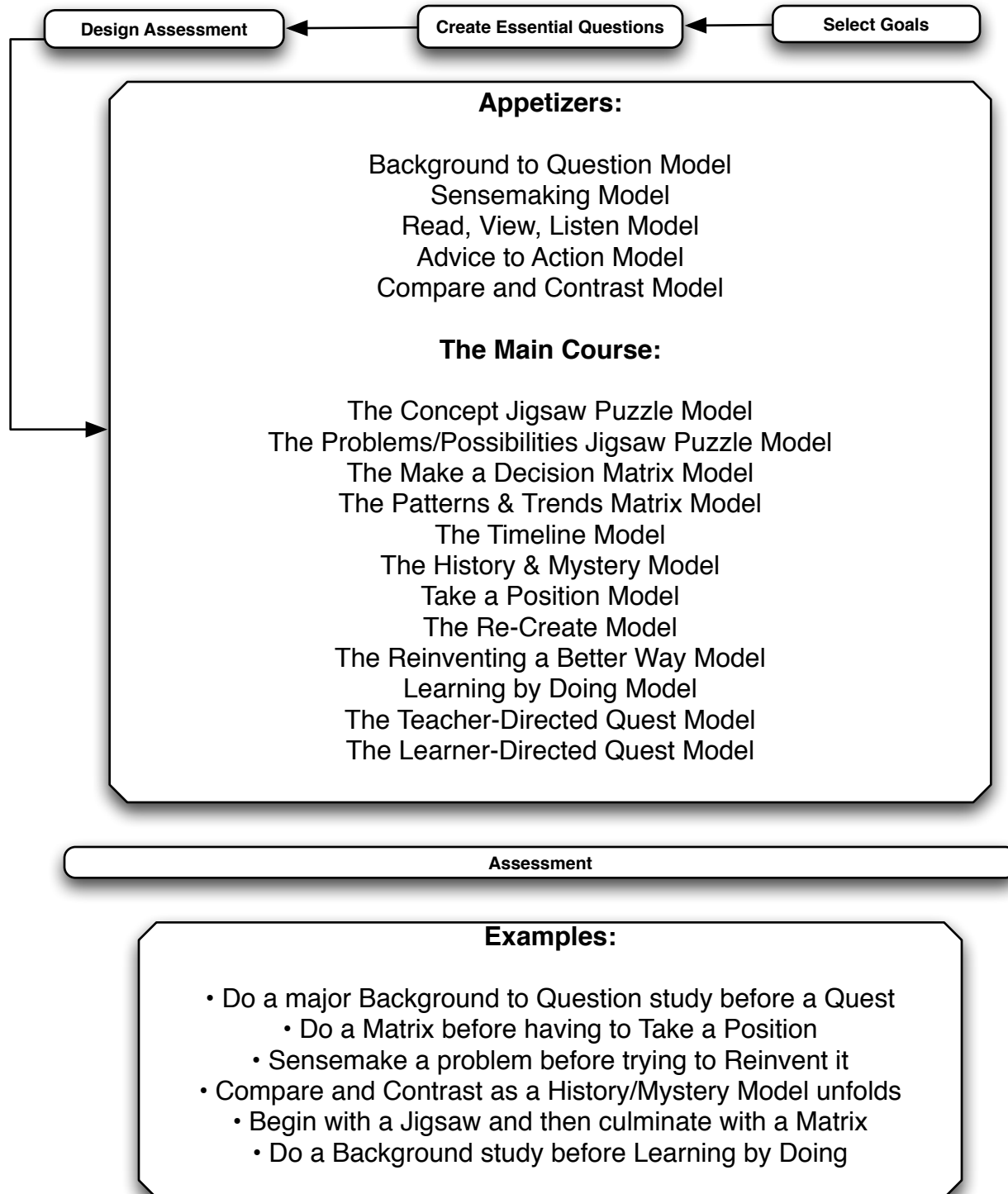
- Extends content learning
- Student ownership
- Build learning to learn skills
- Take action on a cause
- Solve a problem
- Make a decision
- Answer student-generated questions
- Pursue burning issues
- Follow inspiration
- Application of learned skills and models
- Utilize student strengths
- Plagiarism not an issue

Possible Projects:

- Local concerns
- Global issues
- Environmental stewardship
- Design and technology
- Political action
- Health issues
- Support for a cause
- Initiating change
- Citizenship
- Media creation

☆ Life Skill: With a spark you can light a fire. ☆

Think Model #18: Mix It Up! (Be Creative in Combining/Modifying All the Models)



☆ **Life Skill: I can learn anything I need to know, do, or understand.** ☆