Ban Those Bird Units Model Testing
An Action Research Project

David V. Loertscher
In conjunction with the
AASL Research Committee

The Problem

Too many of the learning activities in school libraries are low-level cut and paste activities, such as transferring facts from library resources on to worksheets or just cutting information off the Internet to pass in for a report. Little learning results and plagiarism dominates. Such activities are termed "bird units" after the ubiquitous 4th grade bird reports, but they can be on any topic: explorers, state reports, old famous dead men, or other common K–12 topics and across all disciplines. Many teachers, feeling pressured to have their students achieve, have stopped all interaction with library research reports, because they understand that the time invested in these reports will not produce any positive results. Library media specialists are reluctant to have such activities continue because the potential of the library media center and its resources are being ignored.

Research Question

What is the impact on learning and collaboration of high-level learning activities in information-rich and technology-rich environments? In other words, when higher-level learning activities replace “bird units” in libraries, what is the impact on learning and collaboration?

Methodology

Library media specialist and teacher teams K-12 will be asked to transform bird units into higher-level learning experiences and evaluate the result upon learning. Two-page descriptions of the transformation and the results will be returned to David Loertscher at 312 South 1000 East, Salt Lake City UT 84102.

Results

The results will be posted onhttp://www.davidvl.org under Ban Those Bird Units Project and in other appropriate publications. Participants are also urged to use the experience to promote the teaching role of the library media program.

The 15 Ban Those Bird Units are copyrighted by David V. Loertscher, Carol Koechlin, and Sandi Zwaan from their Book: *Ban Those Bird Units* published by Hi Willow Research and Publishing, 2005. ISBN: 1-933170-11-5 available from http://www.lmcsource.com. Copies of the models can be made for local consumption but not for sale or publication without the consent of the authors.

Instructions

Who? Library media specialists who are teaming collaboratively with classroom teachers in creating, teaching, and evaluating high-level learning experiences in the library are invited to participate. Public, private, and any grade level plus subject units in any discipline are included in the study.

When? The action research project will take place during the spring semester of 2005 and the fall semester of 2005. Reports are due May 15th and December 15th of 2005.

Why? Research in many states indicate that the library media program in general has positive effects on student achievement, but this action research asks about a direct impact on both teaching and learning when "bird units" are replace with higher-level learning experiences.

How? Here is the methodology:

1. Study the ban those bird unit models carefully until you understand how to transform a learning experience using them. You need not slavishly follow a model but can be creative – as long as your design pushes thinking and understanding. While a copy of the book: *Ban Those Bird Units* by David Loertscher (available at http://www.lmcsource.com) is not necessary, it does contain many sample units with appropriate information literacy and technology suggestions.
2. Introduce a teacher to a model that might improve a "bird unit" learning unit that has been done previously. Work through a normal unit planning cycle where a standard is selected, an assessment prepared, and learning activities designed. Be sure that the design uses various types of information resources, has an information literacy component, and uses technology appropriately. For the assessment, we recommend a jointly created rubric containing both the librarian's and the teacher's concerns. If that is not possible, design some other assessment that will indicate to both partners what the students know and are able to do.
3. Teach the unit collaboratively and assess the learning.
4. Hold a 10-15 minute evaluative conference with the teacher to fill in the evaluation form to be sent to David Loertscher and reflect on successes or failures and what to do the next time.
5. Send the one-page transformation description of the unit and the one-page evaluation of the unit to: David Loertscher, 312 South 1000 East, Salt Lake City UT 84102 or by email attachment to davil@slis.sjsu.edu. Be sure we have your name and contact information as a part of the unit.
6. Use the experience you have gained locally for whatever program direction to wish.
7. P.S. You can send more than one unit transformation along. You may be asked to participate in the AASL Research Forum in Chicago or the AASL national conference in Pittsburg in 2005.
8. PPS: Look for other information and reports on http://www.davidvl.org under Ban Those Birds Project.

Transformation of a Bird Unit Description Form

Name, address, phone number and email address:

Unit title and grade level: _____

One/two sentence Description of the Old Method:

Description of the transformation:
(model used, assessment created, learning activities)

Evaluation Form of a Ban Those Bird Units Transformation

Title of Unit: _____

Grade Level: _____ This unit done collaboratively with _____ # of teachers

Contact information including email address of the LMS:

In a brief conference between the LMS and teachers, rate the following:

1. This collaboration produced: Less learning Similar results More learning than its previous counterpart (circle one)

2. This collaboration took: less time Similar time More time Much more time to plan, execute and evaluate (circle one)

3. This learning experience emphasized higher-level thinking and understanding: Agree Disagree (circle one)

4. This collaboration encouraged both partners to collaborate: More Less in the future. (circle one)

5. As a team, we would like to teach this unit again: About the Same With Modification Using a Different Model (circle one)

6. Collaborative learning experiences like this one would help students score higher on academic achievement tests: Agree Disagree Not sure (cirle one)

What assessment did both partners use to answer the questions above?

Joint Rubrics Other assessments Observation (circle all that apply)

Please describe the assessment briefly:

Please send this sheet along with the transformation description to: David V. Loertscher, 312 South 1000 East, Salt Lake City UT 84102.

Background to Question Model

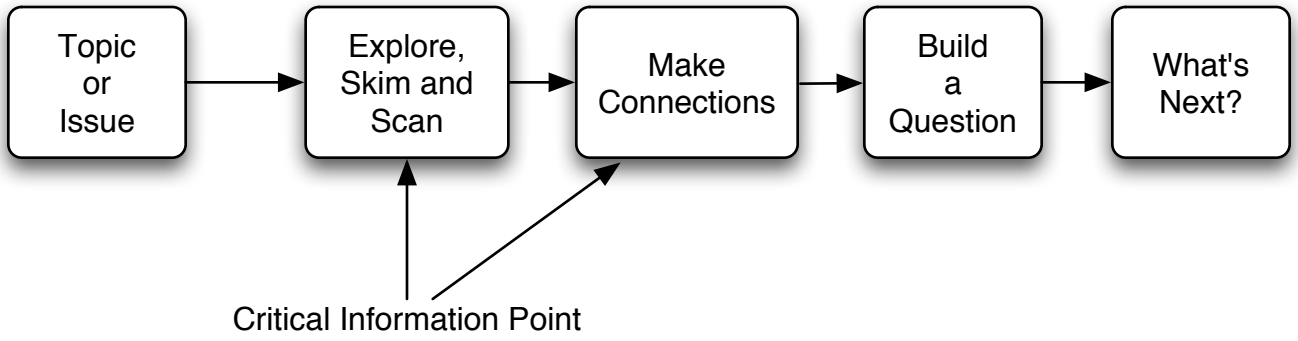
Curriculum Topic and Objectives

Background Building Activity
- Read
- View
- Listen
- Survey
- More is better

Connect New and Old Learning

Build a Question
- Narrow and focus a topic
- Build a quest

Plan a Project
- Goals
- Timeline
- Resources
- Strategies



Why This Model?

- 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

Critical Information Literacy Skills*

- Explore a Topic, K&Z, p. 4
- Search Strategies, K&Z p. 24
- Locate Resources, K&Z p 26
- Select Relevant Data, K&Z p. 62
- Skim, Scan, Consider, K&Z, p. 32
- Make Connections, K&Z p. 116
- Reflect, Transfer, Apply, K&Z p. 166
- Develop Questions, K&Z p. 12
- Define a Research Topic, K&Z p. 8

* Koechlin, Carol and Sandi Zwaan. *Build Your Own Information Literate School*. Hi Willow, 2003

Sensemaking Model
Visualizing / Re-Conceptualizing

Concepts, ideas, or data either not understood or misunderstood

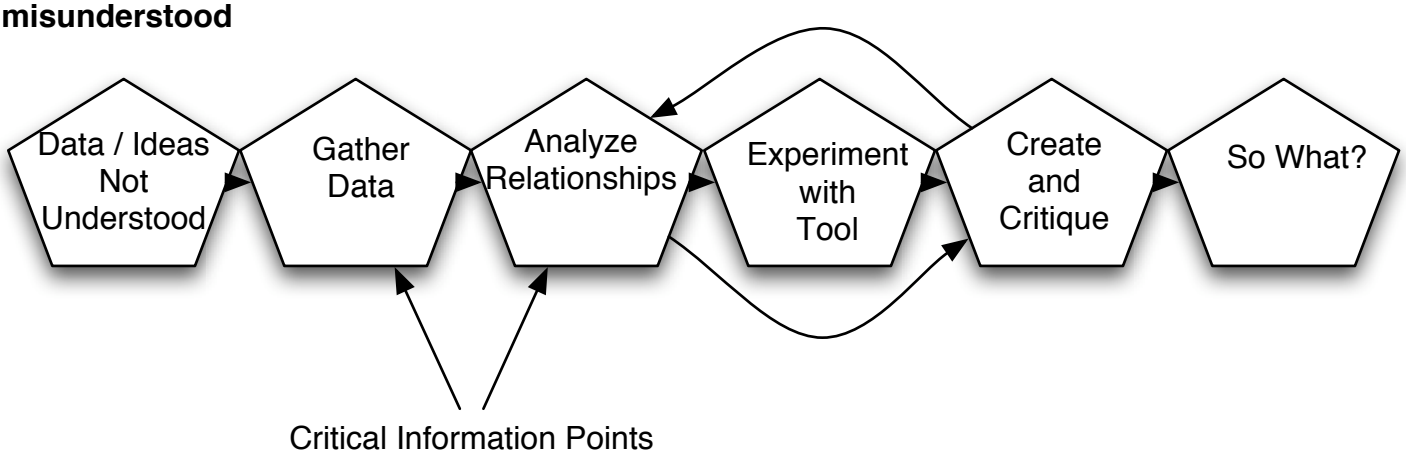
Collect & validate data

Find Connections:
- Sort
- Classify
- Patterns
- Missing Data?

Use Graphic Tools to Assist In Visualization

Create
- Re-Work
- Re-Think

Share and Defend New Understanding



Why Use This Model?

- Take advantage of the addage 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
- Particularly useful for 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

Critical Information Literacy Skills*

- Evaluate Resources, K&Z p.34
- Use Organizers, K&Z p. 90
- Sort, K&Z p. 94
- Compare, K&Z p. 98
- Classify, K&Z p. 102

* Koechlin, Carol and Sandi Zwaan. *Build Your Own Information Literate School*. Hi Willow, 2003.

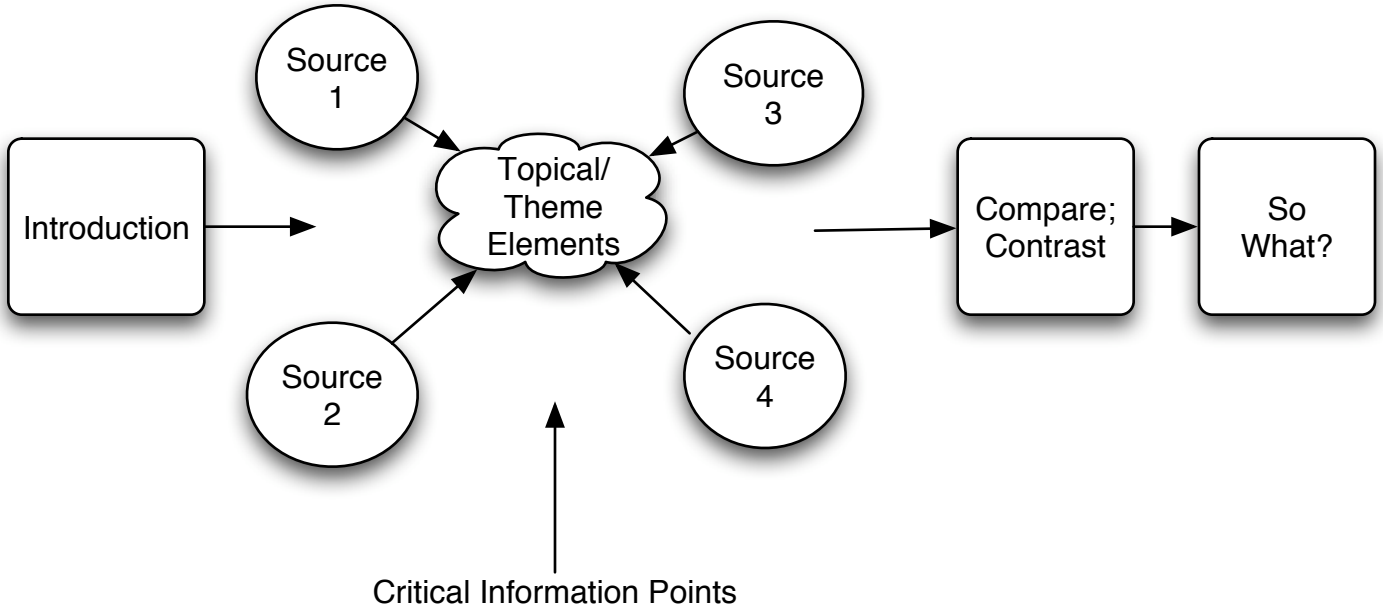
The Read, View, Listen Model

Introduce the topic(s) to be explored along with Objectives

Groups or individuals read, view or listen to many or several items on topic

Compare/ contrast items on theme elements

Summary/ synthesis Activity



Why Use This Model?

- Experience many literary/ written works rather than a single text
- Allow all skill levels 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
- When you can't afford a textbook but have a library

Possible Topics:

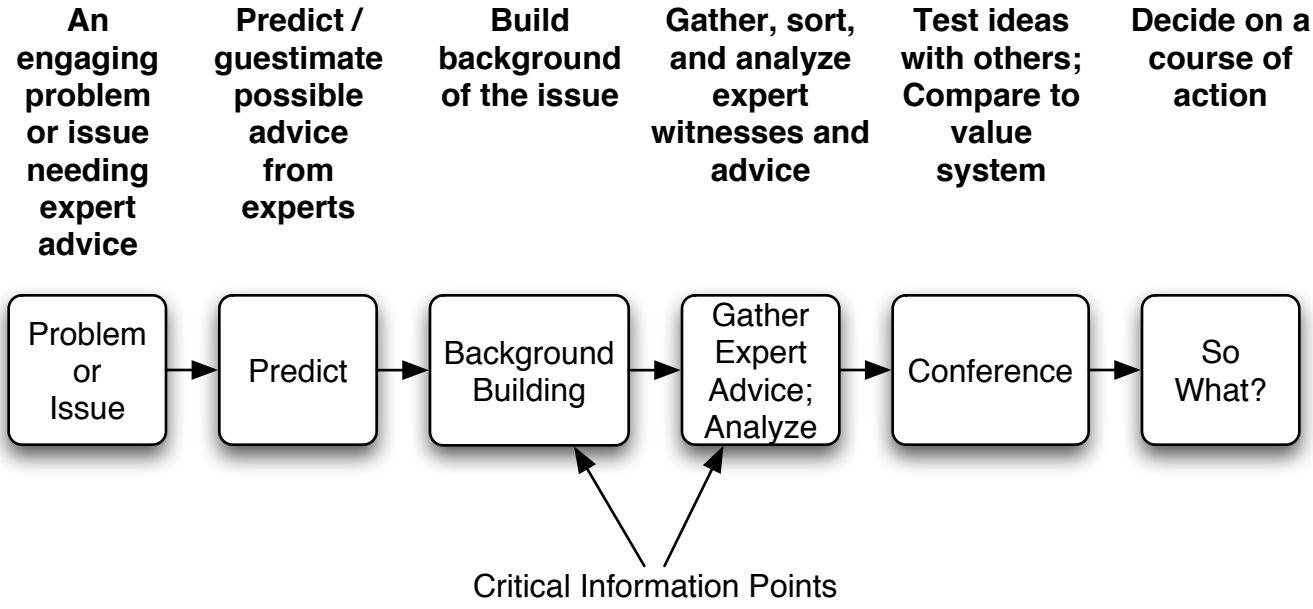
- Literary themes across books
- Similar literary themes across cultures
- Causes of wars across combatants
- News reporting across international newspapers & TV
- Teen angst across teen novels
- Comparison of cultures around the world at the same time period
- Lives of rich and poor - same time, same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

Critical Information Literacy Skills*

- Pre-Reading Strategies, K&Z p. 52
- Skim, Scan, and Consider, K&Z p. 32
- Actively Read, View and Listen, K&Z p. 56
- Read Pictures, K&Z p. 70
- Compare, K&Z p. 98

*Koechlin, Carol and Sandi Zwaan. *Build Your Own Information Literate school.* Hi Willow, 2003

Advice to Action Model



Why This Model?

- To solve real problems
- Judge between good and poor advice
- Affect behavior: judging the difference between personal wishes and prudence
- Understanding the consequences of taking advice
- To understand how historical events were shaped by advice both good and poor
- Making life-saving 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

Critical Information Literacy Skills:

- Use Primary Sources, K&Z p. 46
- Evaluate Resources, K&Z p. 34
- Interpret, Infer, Predict, K&Z p. 130
- Understanding Perspective, K&Z p. 136
- Cause and Effect, K&Z p. 120

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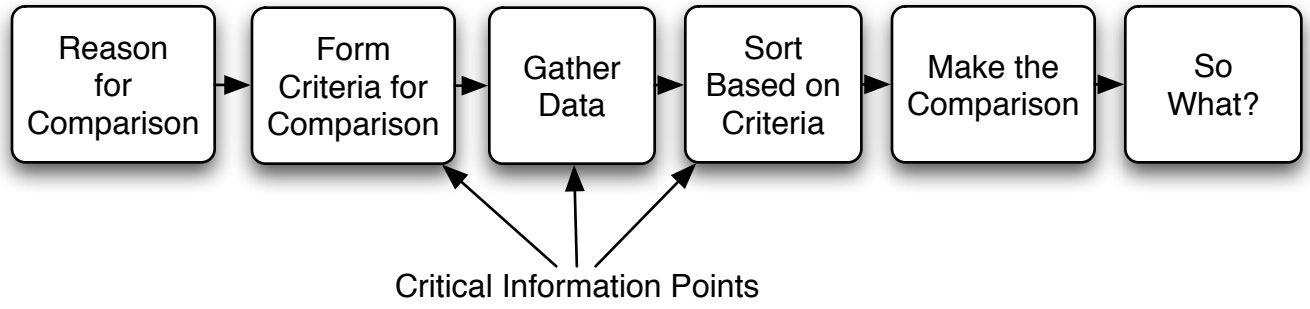
Compare and Contrast Model

Identify purpose and items to be compared	Brainstorm and select the criteria for comparison	Use quality information sources; Gather data	Do the sort with tech assists if needed	Analyze the result	See the big picture



Why Use This Model?

- A much-researched and powerful teaching technique
- Stress quality information to achieve an accurate comparison
- Teaches reason over subjectivity
- Requires tough thinking
- Becomes the basis of 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

Critical Information Literacy Skills*

- Use Primary Sources, K&Z p.46
- Evaluate Resources, K&Z, p. 34
- Note Making, K&Z p. 76
- Sort, K&Z p. 94
- Compare, K&Z p.98
- Synthesize, K&Z p. 145

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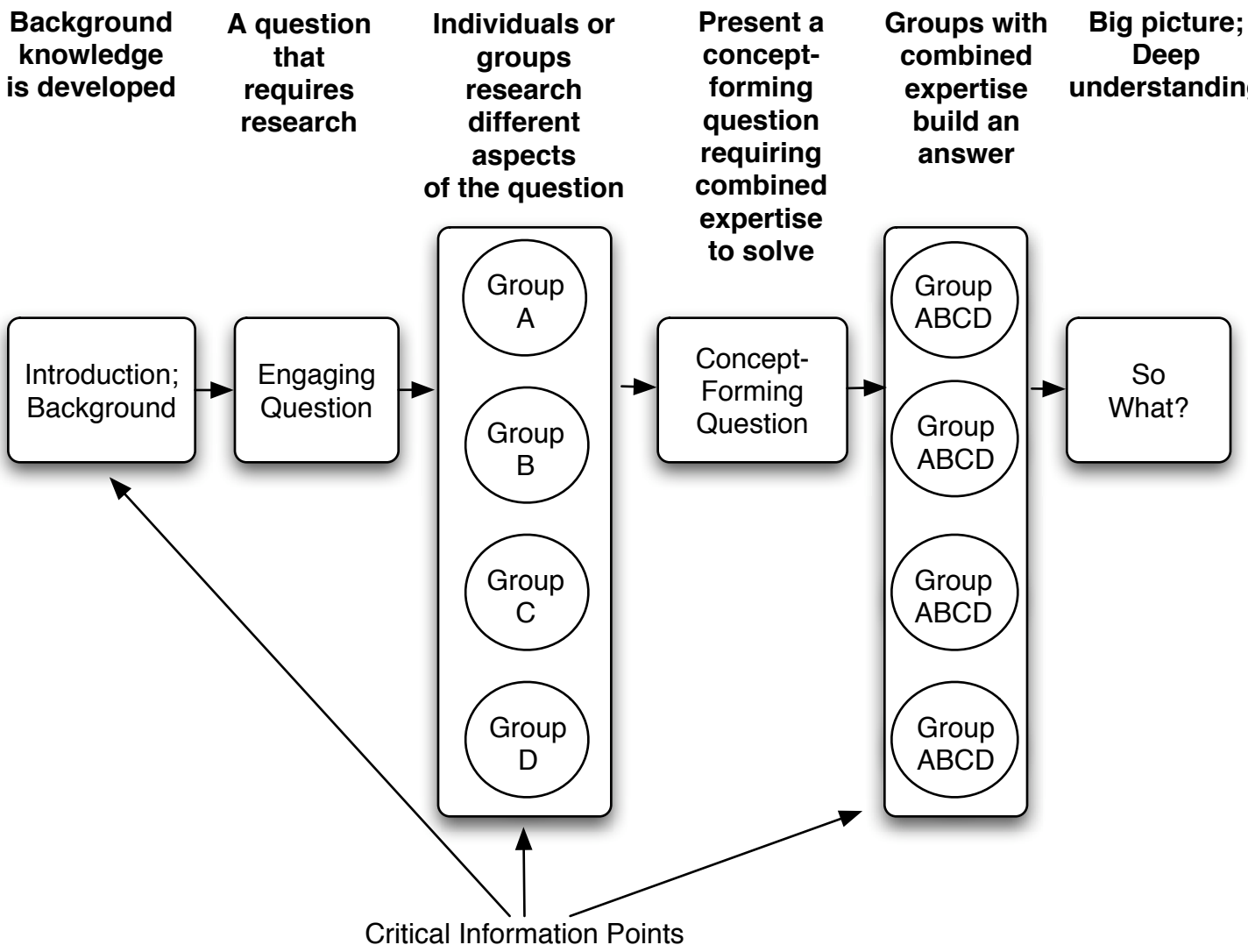
The Concept Jigsaw Puzzle Model



Why This Model?

- To develop deep understanding rather than surface knowledge
- To develop group skills
- Two heads are better than one
- A prototype of the real world of business and industry
- To stimulate each learner into making a contribution
- Use to introduce lots of material quickly

Possible Topics:

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

Critical Information Literacy Skills*

- Explore a Topic, K&Z p. 4
- Develop Questions, K&Z p. 12
- Locate Resources, K&Z p. 28
- Evaluate Resources, K&Z p. 34
- Collaborate, K&Z p. 140

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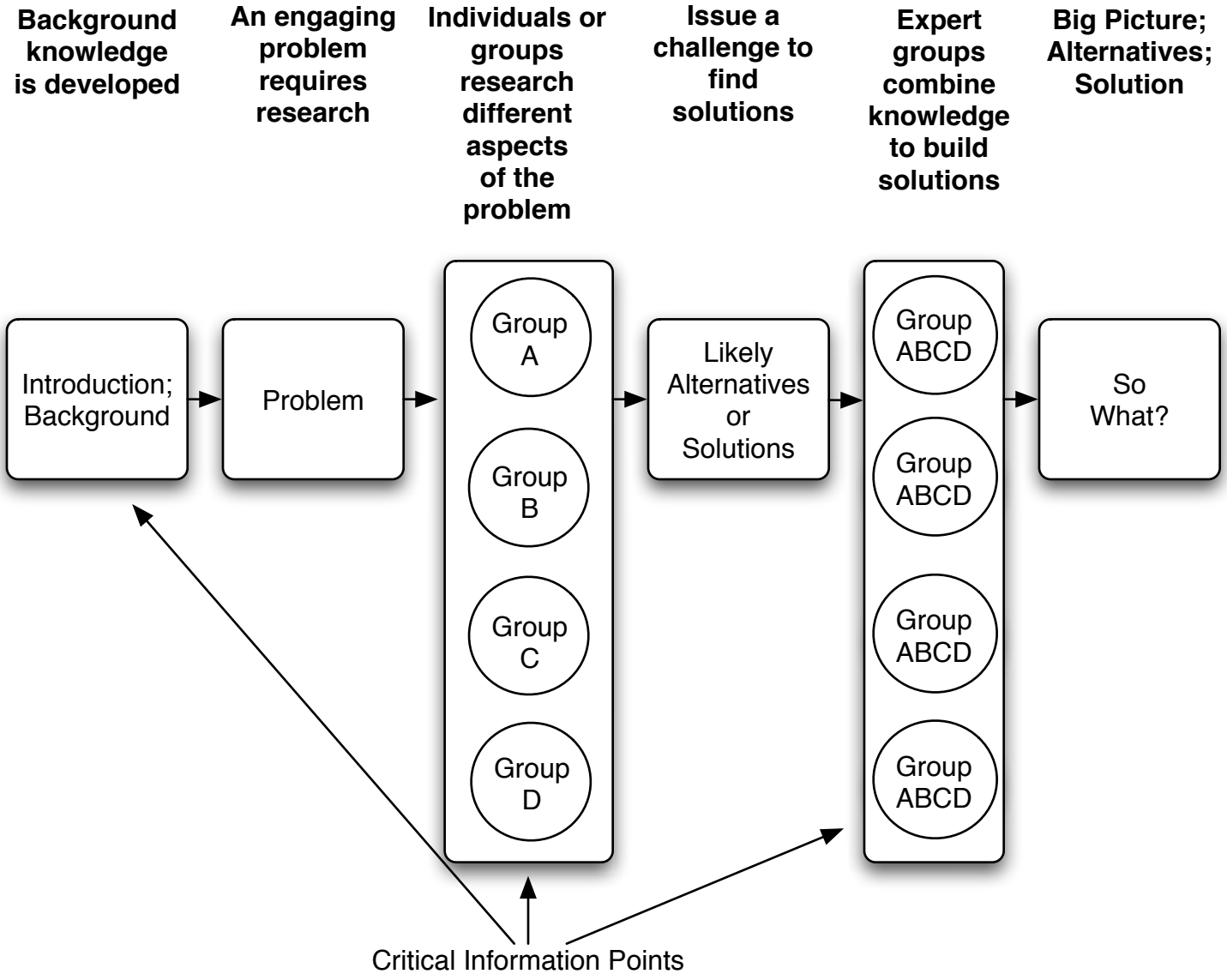
The Problems/Possibilities Jigsaw Puzzle Model



Why This Model?

- To learn real-world problem-solivng skills
- Build group problem-solving skills
- A prototype of the real world of business and industry
- To stimulate each learner into making a contribution
- To encourage investigation, determination, and perserverence

Possible Topics:

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

Critical Information Literacy Skills*

- Select Relevant Data, K&Z p. 54
- Note Making, K&Z p. 76
- Collaborate, K&Z p. 140
- Make Connections, K&Z p.116
- Synthesize, K&Z p. 145

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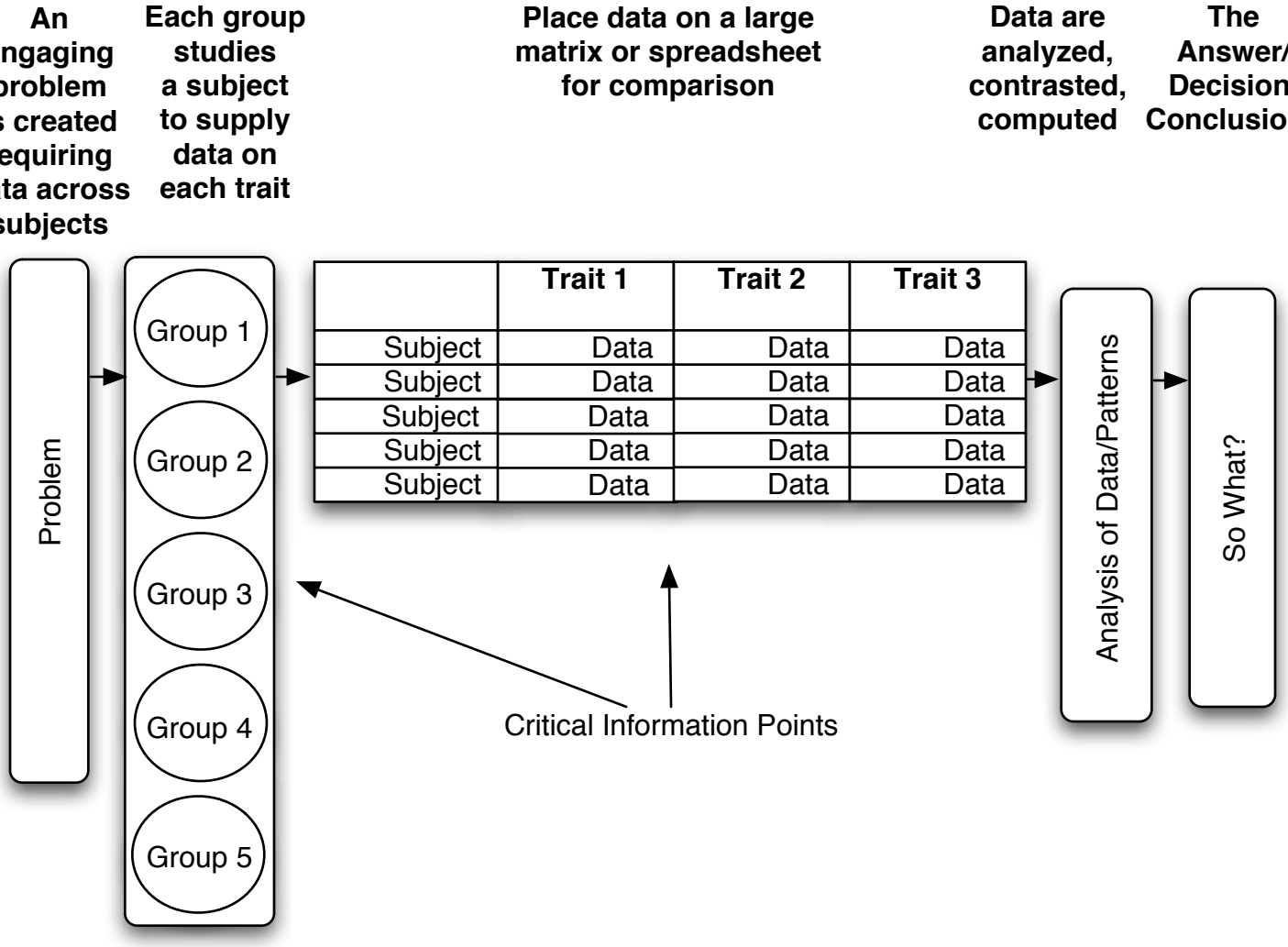
The Matrix Model



Why This Model?

- To promote accurate data gathering
- Organizing data for better decisionmaking or understanding
- Facilitating a look at patterns and trends
- Seeing the dangers of bad data in any cell
- Teaching complex issues; solving complex problems

Possible Topics:

- Pick a pet for the classroom
- Are there weapons of mass destruction?
- Comparison of possible new highways
- Comparison of expert opinions about a topic
- Comparison of candidates for office
- Comparing topics of interest

Critical Information Literacy Skills*

- Evaluate Resources, K&Z p. 34
- Select Relevant Data, K&Z p. 62
- Legal and Ethical Use of Information and Ideas, K&Z p. 82
- Share and Use, K&Z p. 156
- Reflect, Transfer and Apply, K&Z p. 166

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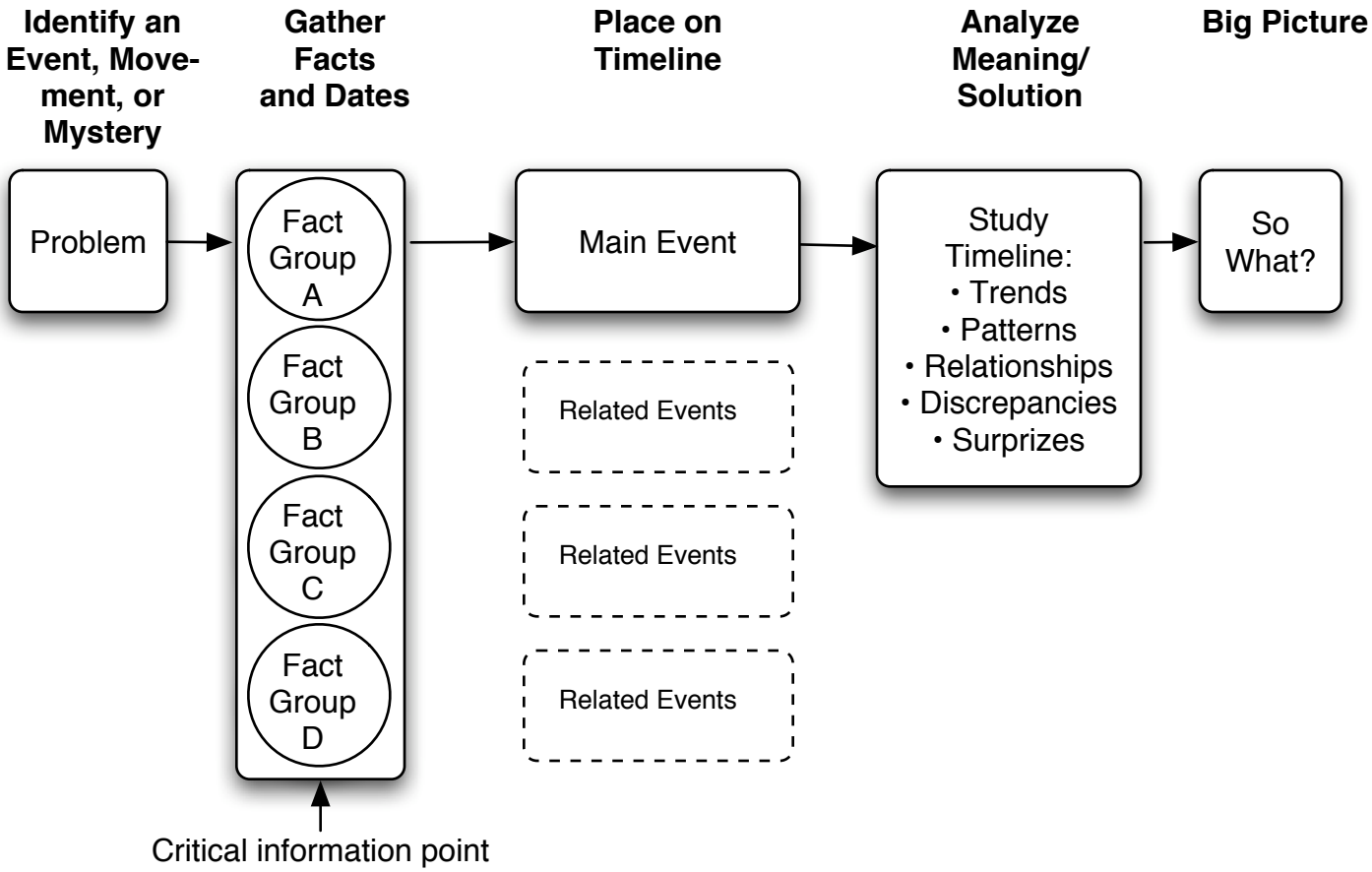
The Timeline Model



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

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.

Critical Information Literacy Skills*

- Actively Read, View & Listen, K&Z p. 56
- Select Relevant Data, K&Z p. 62
- Sort, K&Z p. 94
- Note Making, K&Z p. 76
- Identify and Investigate Patterns and Trends, K&Z p. 108

*Koechlin, Carol and Sandi Zwaa. *build Your Own Information Literate School.* Hi Willow, 2003

History & Mystery Model

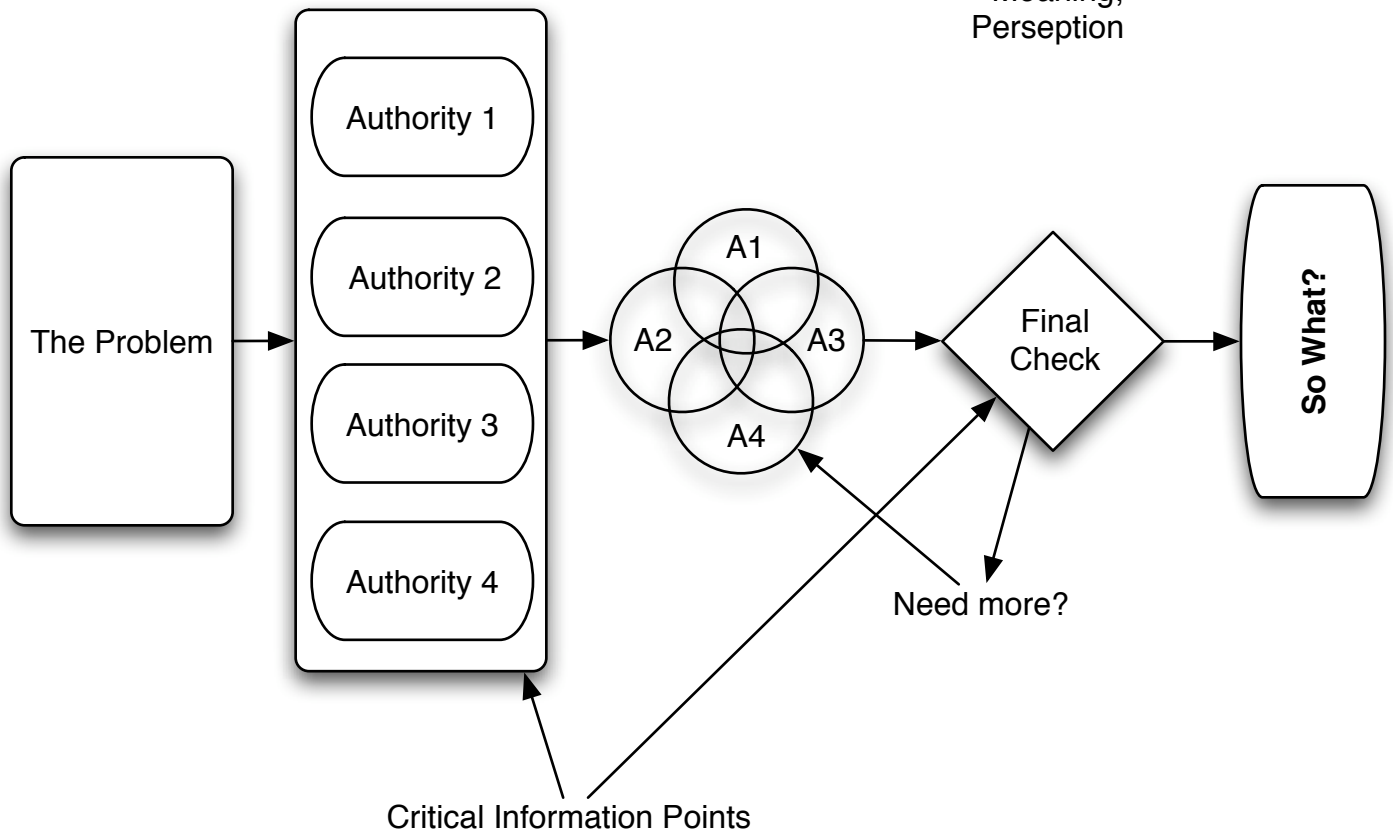
Build a Case for Solving the History/Mystery Problem

Study Primary/Secondary Evidence

Compare/ Contrast Activity

Check Evidence
• New Evidence Available?
• Reject some Data?
• Meaning; Perseption

Resolution



Why Use This Model?

• 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 catastropies
• Advances in technology
• Influence of artists/ authors
• Development of art forms and genres

Critical Information Literacy Skills*

• Select Relevant Data, K&Z p. 62
• Sort, K&Z p. 94
• Determining Fact, K&Z p. 66
• Compare, K&Z p. 98
• Make Connections, K&Z p. 116

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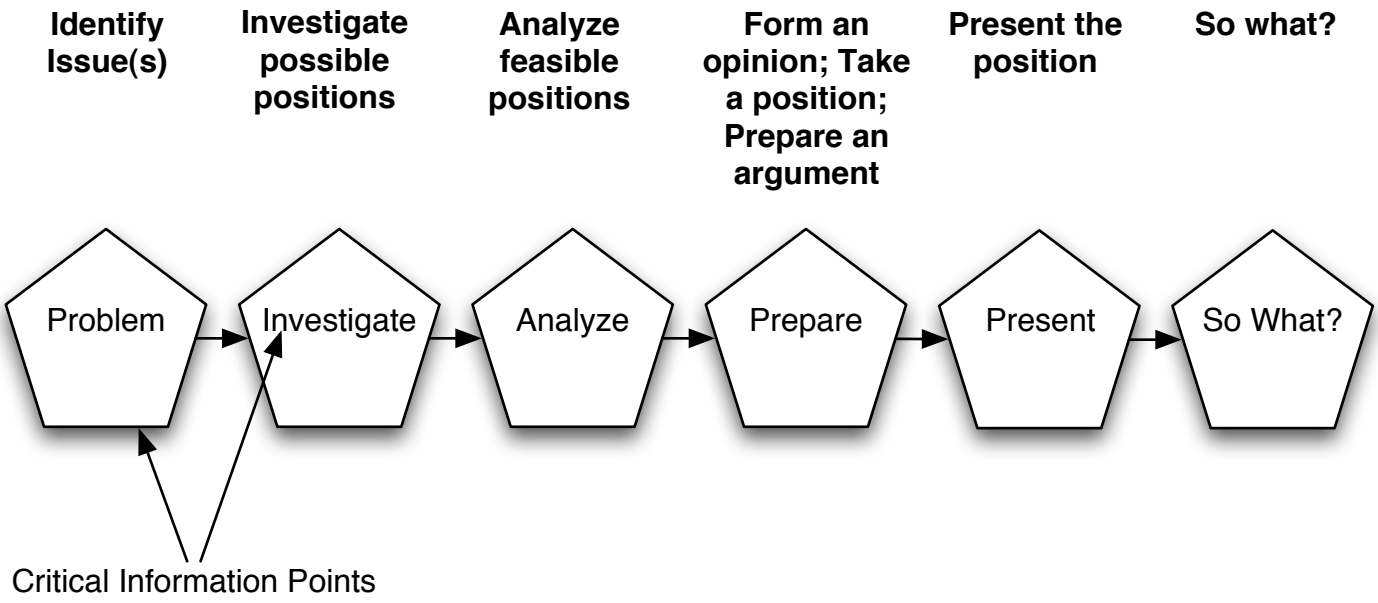
Take a Position Model



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 the skills for living and participating in a democratic society

Sample Topics

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

Sample Products:

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

Critical Information Literacy Skills*

- Actively Read, View, and Listen, K&Z p. 45
- Select Relevant Data, K&Z p. 62
- Determine Fact, K&Z p. 66
- Understanding Perspective, K&Z p. 136
- Share and Use, K&Z p. 155

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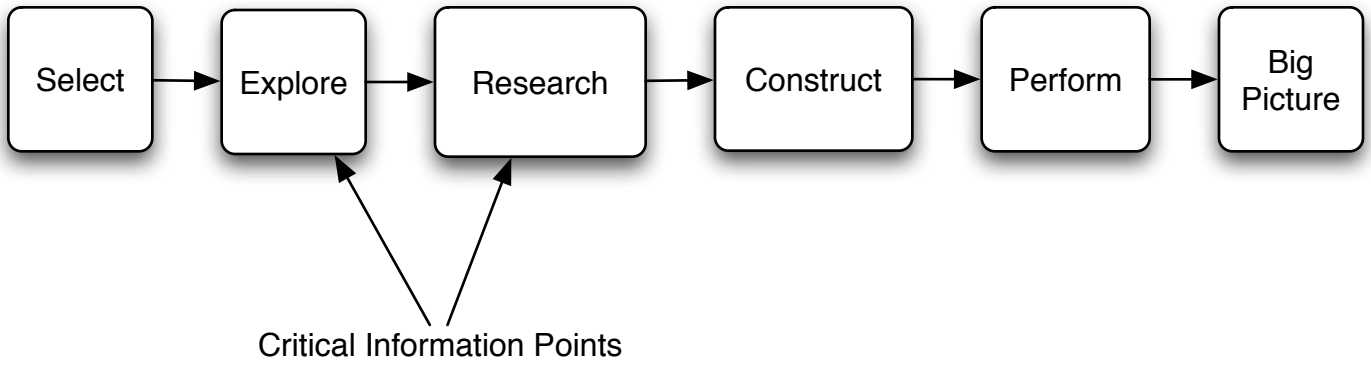
The Re-Create Model

Select event, issue, time period piece	**Explore event/ drama**	**Research every possible aspect to ensure authenticity**	**Select Format and Construct**	**Perform as:** • Drama • Event • Diary • Newspaper • Picture • Painting • Story	**Big Picture**



Why This Model?

• Why do things, seemingly strange, make sense in context?
• What kinds of persons contribute or distract while a major event is unfolding?
• What can we learn from the unfolding of major events?
• How does excellence in the reconstruction of an event help in the understanding of that event?
• Can we develop empathy for people in their time and place?
• Can we walk in someone else's shoes?
• So we judge the difference between fiction and realistic fiction.

Possible Topics:

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

Critical Information Literacy Skills*

• Use Primary Sources, K&Z p. 46
• Read Pictures, K&Z p. 70
• Make Connections, K&Z p. 116
• Interpret, Infer, Predict, K&Z p. 130
• Respond to Text, K&Z p. 112
• Impact, K&Z p. 124

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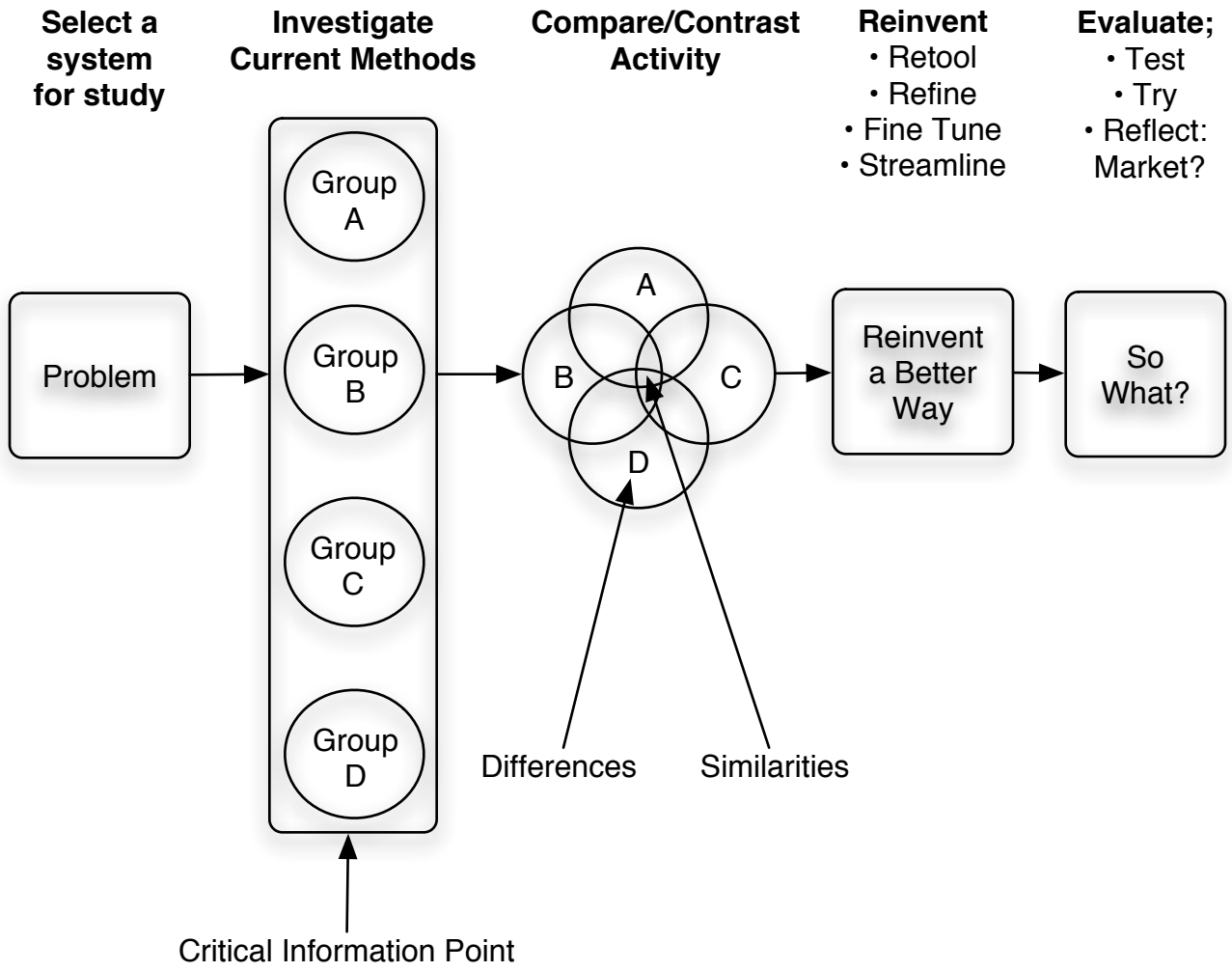
Reinventing a Better Way Model
(Systems Analysis)



Why Use This Model?

- Much of our economy depends on efficiency
- Prepares for competitions (best ideas)
- Production and marketing plans and Patents
- Stimulates creativity
- Simulates authentic problems
- Builds group work skills
- Saves time, money, natural resources, and energy

Possible Topics:

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

Critical Information Literacy Skills*

- Use Primary Sources. K&Z p. 46
- Make Connections, K&Z p. 116
- Use Organizers, K&Z p. 90
- Synthesize, K&Z p. 146
- Reflect, Transfer & Apply, K&Z p. 165

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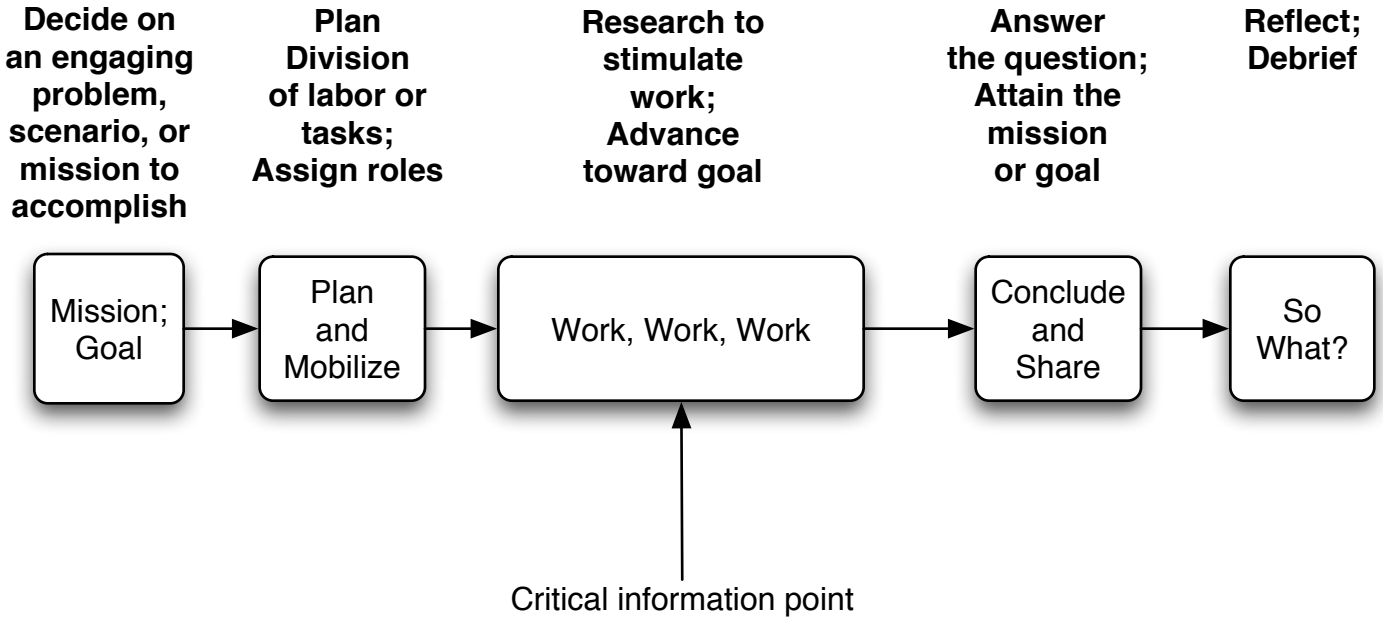
The Quest Model
(The Well-Designed Research, Experiment, or Project)



Why Use 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

Critical Information Literacy Skills*

- Define and Clarify, K&Z p. 1
- Locate and Retrieve, K&Z p. 23
- Select, Process, and Record Data, K&Z p. 51
- Analyze, K&Z p. 89
- Synthesize, K&Z p. 145
- Share and Use, K&Z p. 155
- Reflect, Transfer, and Apply, K&Z p. 165
- Adding It All Up, K&Z, p 173

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Mix It Up!

(Be Creative in Combining/Modifying All the Models)

Appetizers:

Background to Question Model
Sensemaking Model
Read, View, and Listen Model
Advice to Action Model
Compare and Contrast Model

The Main Course:

The Concept Jigsaw Puzzle Model
The Problems/Possibilities Jigsaw Puzzle Model
The Matrix Model
The Timeline Model
The History and Mystery Model
Take a Position Model
The Re-Create Model
The Reinventing a Better Way Model
The Quest Model

Examples:

- Do a Major Background to Question study before a Quest
- Do a Matrix before having to Take a Position
- Sensemake a problem before trying to Reinvent it
- Compare and Contrast as a History/Mystery Model unfolds
- Begin with a Jigsaw and then culminate with a Matrix