

Research with Primary Students: Not an Impossible Dream

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What is Research?

Report or research?

- Report
 - Facts, basic information found in resource materials
- Research
 - Use facts, synthesize, evaluate and draw conclusions
 - Answer “big” questions

Different Kinds of Research

- Historical
 - To re-create
 - History of a town, a person, an event
- Developmental
 - Investigating patterns or trends
 - Chart and record changes, discover common characteristics, record progress
- Experimental
 - Cause and Effect
 - Use of experimental and control groups, variables, record results

More

- Descriptive
 - Collecting data, surveys, charts and graphs
 - Opinion surveys, likes and dislikes, reactions, frequency
- Correlational
 - When two things go together
 - What effect one thing has on another, finding relationships
- Case and Field Study
 - Discovering all you can about a place, person or group
 - Predicting future based on the past, find out how one thing influences another, effectiveness of something

An Independent Study Model



The Big6™ Skills

- Big6(tm) is a systematic approach to information problem-solving developed by Michael B. Eisenberg and Robert E. Berkowitz in the mid-1980's.

– 1. Task Definition

– 2. Information Seeking Strategies

– 3. Location and Access

– 4. Use of Information

– 5. Synthesis

– 6. Evaluation

Hitting the Bulls-Eye

- Finding the right topic question
- Finding your passion
 - What do you love learning about?
 - What do you love doing?
 - What do you love to think about?
 - What would you see yourself doing as a grown-up?
- List the topics on the worksheet
 - Narrow down the topics on the Bulls-Eye



How to Get to the Big Question

- What is it about _____ that really interests you?
- What do you already know about _____?
- How do you think . . . ?
- Why do you think . . . ?
 - Try to avoid who, what, where & when
- Compare, evaluate, synthesize information to draw conclusions

Big Questions

- What caused the middle ages?
- Is humor the same in all cultures?
- What is the best way to clean up oil spills?
- Which US president was the best?
- Would a new, safer bicycle storage system cause more students to ride their bikes to school?
- How can we increase self-confidence in middle school girls

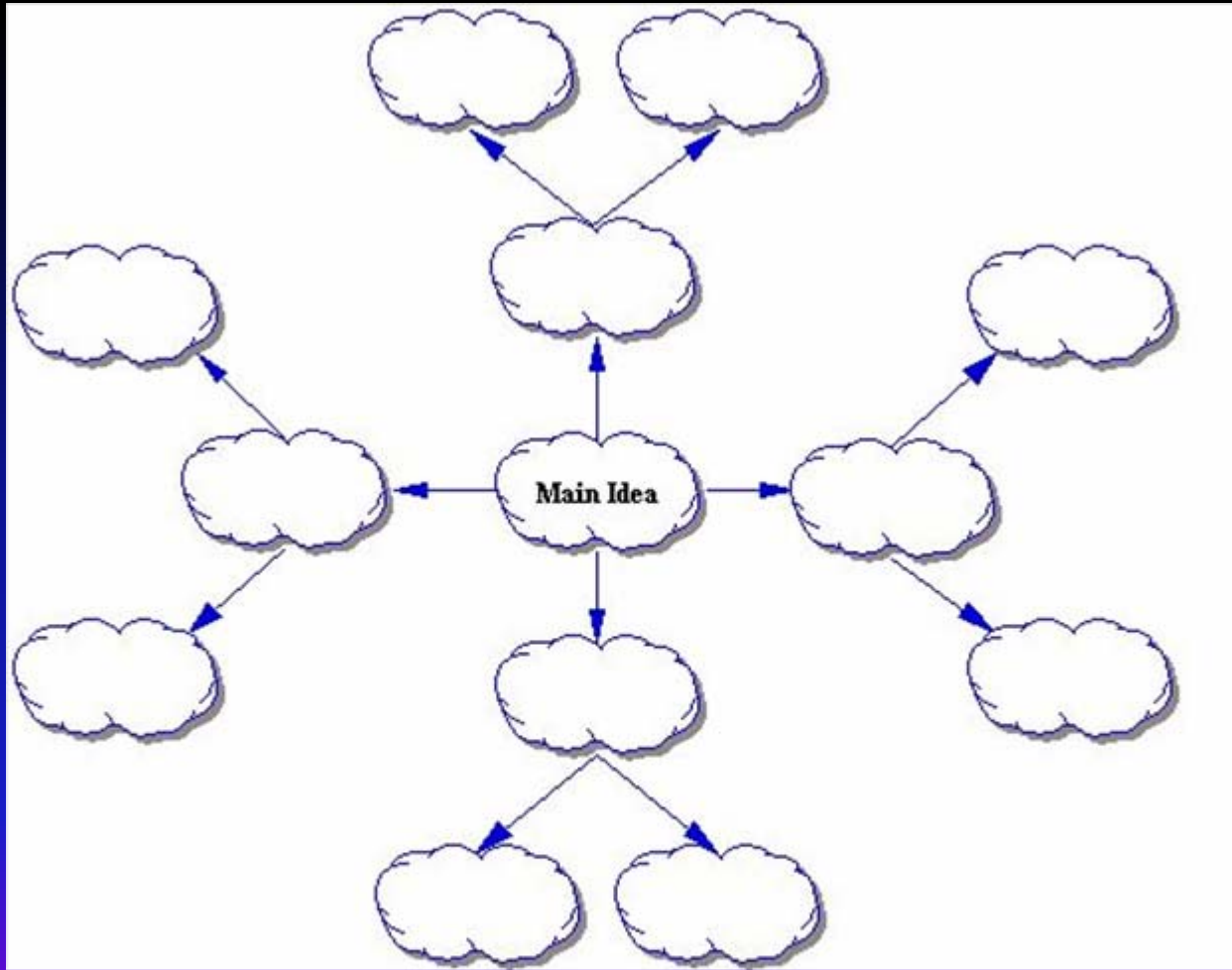
More “Big Questions”

- How does the engine make a car work?
- What did the Statue of Liberty mean to people coming to the United States?
- What does it take to be a veterinarian?
- How are roller coasters able to do the things they do?
- What was the impact of JFK’s presidency on the US?
- What does it take to be the predator of poisonous snakes?
- How is the culture of France different than ours?

Getting Started

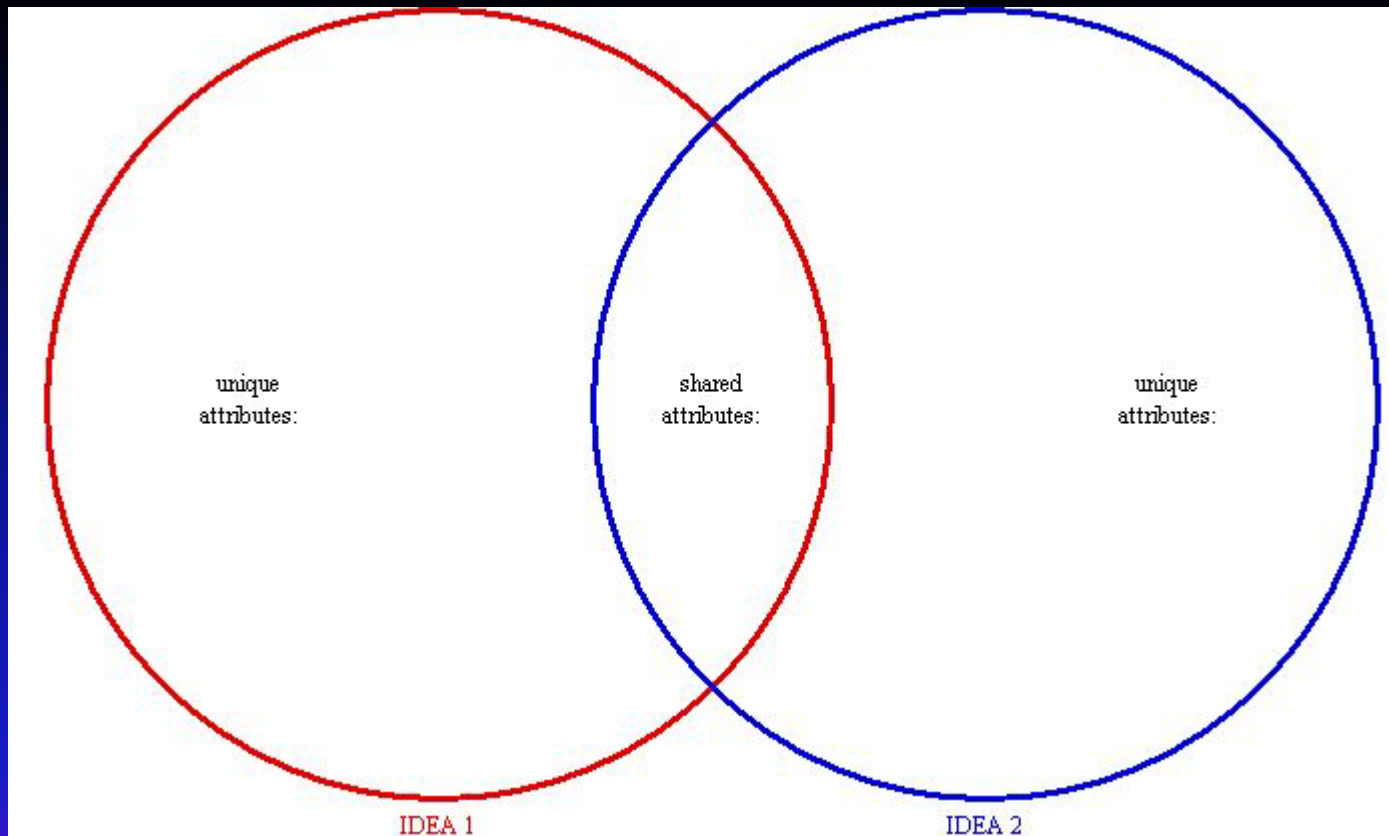
- What do I **ALREADY** know about my topic?
- What do I **THINK** I want to know?
- What do I **NEED** to know?
- How do I think I might **SHARE** what I learn?
- Generate basic questions
- Survey information
 - Gather resources
 - Collect information
 - Re-assess your big question or topic if necessary

Using Graphic Organizers

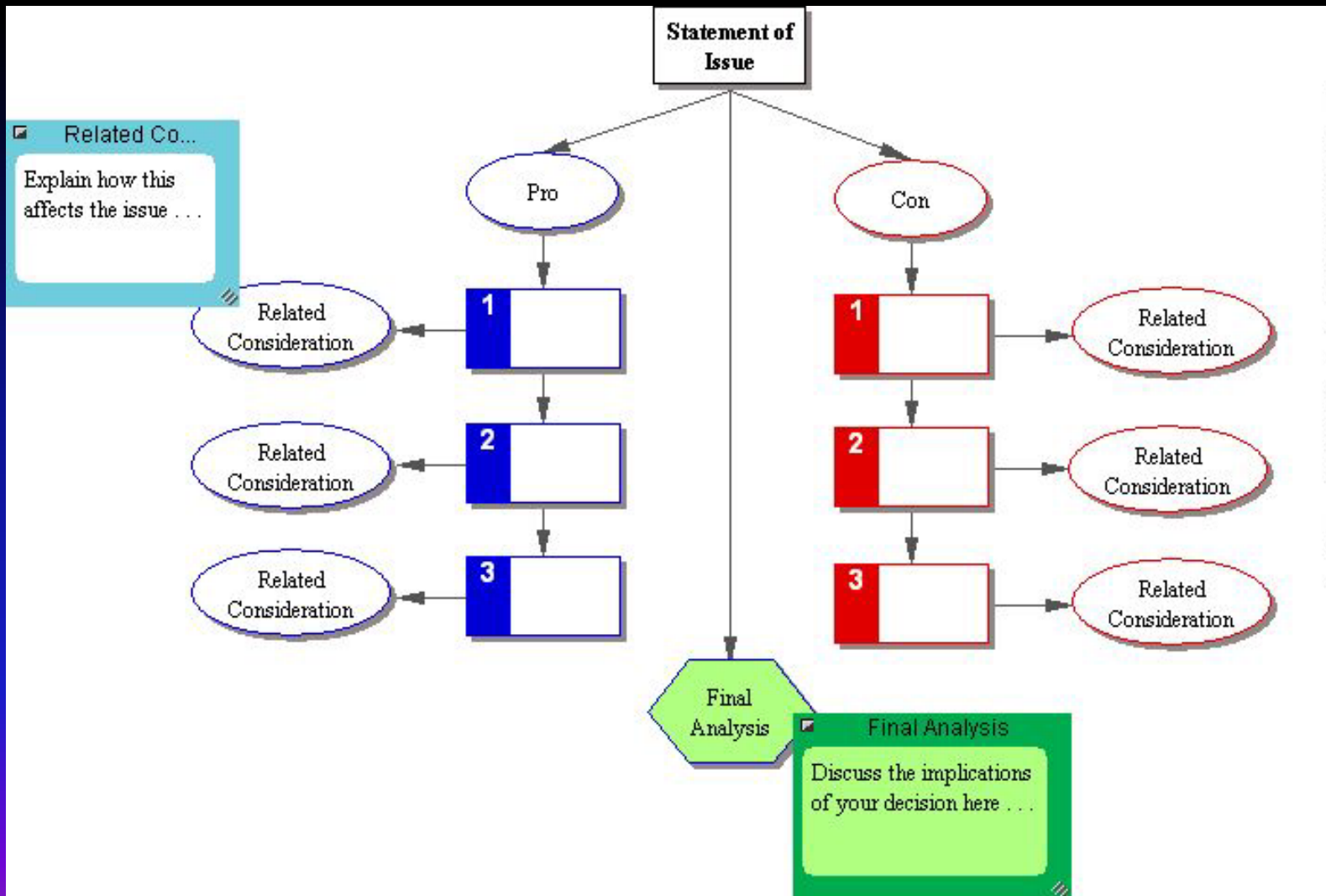


Inspiration

Venn Diagrams



Pros and Cons



Resources

- Primary resources
 - Documents and images
 - People (interviews)
 - Data collection & surveys
 - Experiments
- Secondary resources
 - Books & reference materials
 - Internet
 - Video, audio
 - Newspapers, magazines



Kennedy



Keeping Organized

- Taking Notes
- Keeping a folder
- Using pre-made forms, note-cards, or note-taking on the computer
- Creating a bibliography
- Planning a timeline for work
- Using a checklist or record sheet to keep track of progress

Creating a Product

- What will best share your learning?
- Analysis, Synthesis and Evaluation
- Not “just the facts”
- Creativity and Originality
- People DO judge a book by it's cover
 - Life skill of how to make your information attractive to an audience

Training Young Students

- What if they're not ready for independent research?
 - Seminars
 - Guided group/independent research

Seminars

- Generate a long list of possible topics
- Narrow down the topics by repeated voting
- Groups of 3-4 selected by interest in topic
- Web questions about the topic
- What's the BIG QUESTION
- Web the BIG QUESTION to generate sub questions
- Divide and conquer – who will find the answers to the questions?

Seminars p2

- Where will we find the answers?
- Locate resources and record information
- Synthesize information
 - What do we really know and how do we know it?
- How will we share what we know?
 - Work on presentation skills
- Develop a group presentation to an audience

Guided Independent Research

- Group topic Individual choices within the topic
 - Examples
 - Famous people
 - Endangered Animals
- Set of information/facts required
- Look for the interesting, unusual
- Creative way of sharing information

Taking it a Step Beyond

- Using persuasion
- Present to an audience
- Find primary resources when possible
- Take action based on your learning
 - Animal rescue
 - Create a book for the library
 - Write an article for the school news

Independent Skills

that often need work . . .

- Locating the important information within the text
- Reading “between the lines”
- Taking notes (only what’s needed)
- Organization (keeping track of everything!)
- Synthesizing and summarizing
- Presentation skills
 - Verbal, written, visual

Using Technology

Content & Process

- Use search tools on the Internet
 - View video or animation
- Locate photos and primary resources

Products

- Multimedia production
 - Video production
- Text and graphics/photos