ALL STUDENTS REALLY CAN DO RESEARCH WITHOUT COPYING!

Independent Investigation Method

Developed by

Cindy Nottage and Virginia Morse - Consultants
Independent Investigation Method: The Model
INDEPENDENT INVESTIGATION METHOD

Follow These Footsteps to Success in a Research Project

Topic
Goal Setting
Research
Organizing
Goal Evaluation
Product
Presentation
Step 1 - Topic

- Researchers record information they already know (facts) and things they want to learn (questions) about a topic they have chosen or been assigned.

- **Standard 1:** Make perceptive and well-developed connections to prior knowledge.

- **Standard 4:** Express ideas and concerns clearly and respectfully in conversations and group discussions.
TEACHER ESSENTIAL QUESTIONS

UNIT: **NATIVE AMERICANS**

**ESSENTIAL QUESTION:**
What characteristics are critical to a tribe’s identity?

**UNIT FOCUS QUESTIONS** *(Native Americans of the Southwest)*

1. Why was your tribe able to survive in its environment?
2. How does your tribe pass on its traditions and beliefs?
3. What roles and jobs do the different tribe members have?
THE HOOK!
(WHAT INVITES STUDENTS TO LEARN?)

- Set up an interest center
- Use themed learning centers
- Make a display of pictures/ artifacts, newspaper clippings/magazine articles
- Invite an expert to make a presentation – Native American, museum curator, a tourist
- Read themed books to the class
- Show a video about Native Americans
- Incorporate the theme into other learning areas

Pursue areas of passionate interest in depth within topics of study
STUDENT CONCEPT MAP

Web ideas about your Topic on the Concept Map using what you already know and questions about what you want to learn.

USE GRAPHIC ORGANIZERS TO:

NARROW THE TOPIC

FORMULATE QUESTIONS

ASSESS INTEREST & PRIOR KNOWLEDGE
GLOSSARY OF THE STUDY

List NEW words and their meanings that are key to the understanding of the topic.

- **kiva**: an underground ceremonial chamber
- **ancestors**: family members who have lived before your birth
- **mesa**: a high flat-topped hill
- **kachina**: ancestor spirits represented in dances, by dolls, masks
- **reservation**: an area that can be used by a specific Native American tribe
Step 2 – Goal setting

• Researchers set goals by developing questions to guide their study. Other goals might include a time management plan, types of resources, and amount of information and key vocabulary words to be gathered.

• **Standard 1** Ask specific questions to clarify and extend meaning.

• **Standard 3** Make decisions about the quality and dependability of texts and experiences based on some criteria.
Goal Setting

SETTING RESEARCH GOALS

My Notefact Goal:  35
Required Glossary Entries:  10
Required Number of Resources:  4
Required Resource Types:  Book
Internet
Primary Source

QUESTIONS TO GUIDE MY RESEARCH

Teacher Question: (Essential question(s) go here)
What characteristics are critical to a tribe’s identity?

My Goal-Setting Questions:

1. How did the Hopi use their environment for food, shelter, and other things?
2. ________________________

FOCUSING ON SPECIFIC GOALS

FORMULATING QUESTIONS
GOOD QUESTIONS CUBES
ACTIVITY
With your partner

1. Roll cubes one time.
2. Write at least 3 questions about your tribe using the words you rolled.
3. Roll cubes again, making sure the words are different from the first roll.
4. Write at least 3 questions about your tribe for each roll using the words you rolled.
5. Choose your favorite(s) to share with the class.
Good Questions Cubes

Start your students with the red and blue words.

They can also add or substitute the green words to get new ideas.

**Red Cube**
- Who
- What/Which
- Why
- When
- Where
- How

**Blue Cube**
- Can
- Would
- is
- Will
- Might
- Did

**Green Cube**
- Predict
- Analyze
- Verify
- Compare
- Contrast
- List
Step 3 - Research

• Researchers use a variety of resources and strategies so they can gather and record information, focusing on goals set in Step 2.

• **Standard 1:** Select information appropriate to the purpose of their investigation and relate ideas from one text to another.

• **Standard 2:** Read and view texts and performances from a wide range of authors, subjects, and genres.
Don’t Plagiarize!

A Plagiarist is
• Uninformed
• Careless
  • Lazy
• Dishonest

Prevent plagiarism by
• Telling students what it is and not to do it.
• Modeling how to paraphrase and summarize.
  • Checking after 3-5 notefacts.
• Varying the sources and the products.
Steps to Taking Notefacts

- Each resource you use will have its own number. Put that number in the large magnifying glass and on all the small magnifying glasses next to each notefact.
- Record the required information for your bibliography on the solid lines (Manual pp. 50-51).
- Notefacts are short (note) and true (fact).
- Notefacts should be:
  - Written in your own words
  - Short but complete enough to make sense
  - Related to your goal-setting questions
  - Written between the dotted lines – one notefact per space
  - Documented by page number
H O P I

• Descendents of the Anasazi culture, the Hopi people live on the Mesa areas of Northeastern Arizona. Their reservation land is completely surrounded by the large Navajo reservation – the only Indian nation surrounded by another.

• They live much like their industrious ancestors... the villages resembling the pueblos of the past, farming their fields of corn, squash, beans, and melons nearby.

• Hopi baskets, both coiled and wicker, depicting the most simple designs to the most intricate forms of animals and Kachinas, are considered to be some of the finest woven anywhere today.

• Bibliographic Citation: Silver Cloud. Indian Heritage of the Southwest. AZ:Smith-Southwestern, 1992.
Notefacts

Source # 1

Ancestors - Anasazi

Grew squash, corn, beans

3 mesas in northeast AZ

Land in middle of Navajo res.

Make coiled & wicker baskets
Research (Common student errors)

What is a Kachina? It is a spirit, a supernatural being. (Plagiarized)

The Hopi reservation is in the middle of the Navajo reservation (Too many words)

grew corn, squash, beans, melons, made baskets, silver jewelery, pottery, lived in pueblos on mesas, had religious ceremonies in kivas (Too much in 1 notefact)

religious ceremonies (Incomplete information)
Step 4 - Organizing

- Researchers organize their data to allow them to analyze and interpret findings for use in a paper or project.

- **Standard 1:** Use a wide variety of organizational patterns such as chronological, logical, (both deductive and inductive), cause and effect, and comparison and contrast.

- **Standard 1:** Select and use strategies they have been taught for notetaking, organizing, and categorizing information.
Organizing

**Steps to Organizing**

- Think about categories as you read all your notefacts.
- List categories at the bottom of the page.
- Choose a color for each category.
- Color-code your notefacts by category.
- Cut notefacts into strips and glue to category sheet.

- **(GREEN) Plants**
- **(RED) Religion**
- **(BLUE) Food**
- **(BROWN) Survival**
STEP 4  Organizing

What to do with those organized notefacts

• Category Games
• Sequencing
• Outline Format
• Paragraph writing
  ➢ Topic sentences
  ➢ Main ideas/supporting details
  ➢ Elaboration
• Thesis Statement
• Graphic Organizers
The Hopi depend on plants for survival.

A. Crafts
1. weave baskets on Third Mesa
2. use purple hair grass for brushes
3. make dishes out of gourds they grow

B. Food
1. grow corn, beans, squash, melons
Step 5 – Goal Evaluation

• Researchers check to see if they've fulfilled the assignment requirements and evaluate the quality of their work during the first four steps.

• **Standard 2:** Synthesize information from diverse sources and identify complexities and discrepancies in the information.

• **Standard 3:** Evaluate and compare their own and others’ work with regard to different criteria and recognize the change in evaluations when different criteria are considered to be more important.
ASSESSMENT IDEAS

• IIM Goal Evaluation page
• Rubrics
• Glossary Activity
• Paragraph writing
• Visual representation of facts
• Test related to Essential Question
• Whole class review
Name: Karen

Topic: The Hopi Tribe

Write 3 words that are important to your study of the Hopi.

1. Kiva
2. Mesa
3. Anasazi

Now write 1 sentence using each word to show you understand its meaning. Don’t use just the definition.

1. The men climbed down the ladder to worship in the KIVA.

2. The Hopi built their pueblos on the top of three MESAS because they were safe on the high, flat land.

3. The Hopi learned about their ancestors, the ANASAZI, by looking at their cave drawings.
Researchers write papers and create projects to show what they have learned.

**Standard 2:** Write original pieces in a variety of literary forms, correctly using the conventions of the genre and using structure and vocabulary to achieve an effect.

**Standard 3:** Express opinions (in such forms as oral and written reviews, letters to the editor, essays, or persuasive speeches) about events, books, issues, and experiences, supporting their opinions with some evidence.
“WRITTEN” PRODUCTS


Advertisement
Dictionary
Letter
News article
Riddle
Travel log
Speech

Brochure
Fact cards
Magazine
Poetry
Song
Drama
Game
Step 7 - Presentation

- Researchers present their findings to an appropriate audience.

- **Standard 3:** Monitor and adjust their own oral and written presentations to have the greatest influence on a particular audience.

- **Standard 4:** Make effective use of language and style to connect the message with the audience and context.
### Step 7: Presentation

#### Fact Gathering from Presentations

<table>
<thead>
<tr>
<th>PRESENTER(S)</th>
<th>ENVIRONMENT</th>
<th>SURVIVAL</th>
<th>TRADITIONS</th>
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<td>TOPIC: Zuni</td>
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**ACTIVE LISTENING**
Want to see more?

- CHECK OUT THE WEBSITE FOR
  - IIM “TOOLS” FOR SUCCESS WITH RESEARCH
    www.iimresearch.com/products/
  - STUDENT PRODUCTS, IIM UNITS, RESEARCH STRATEGIES, AND OTHER “GOODIES”
    www.iimresearch.com/teacher_lounge/
  - IIM TRAINING
    www.iimresearch.com/training/

- QUESTIONS?
  - CALL CINDY, VIRGINIA, OR KIM AT 1-800-644-5059
  - E-MAIL US AT info@iimresearch.com