











## The Ubiquitous Research Paper: A Two-Part Series

**Research Writing Roundtable Part 1:** The conversation will focus on understanding the differences between inductive and deductive approaches to doing (and writing about) research, and on the importance of aligned expectations, and the need for scaffolding of research stages for maximal student success.

### Research Process Types

Inductive Research Process 	Researched Report Process 	Deductive Persuasive or Argumentative Essay Process 	Report leading to Inductive Question leading to Deductive Conclusion 
Commonly assigned in the sciences and social sciences	Common to all fields (Literature reviews, summary reports)	Common to history and the humanities	Common to all theses and dissertations
<p>To discover (inductive)</p> <p style="text-align: center;">Question-based</p> <p>Uses data and ideas as evidence to answer a question</p> <p>Analyzes and interprets data and ideas</p> <p style="text-align: center;">Reaches a result</p> <p>Creates new knowledge</p>	<p>To inform</p> <p style="text-align: center;">Topic-based</p> <p>Gathers and Summarizes data and ideas</p> <p style="text-align: center;">Presents analysis and interpretation of others</p>	<p>To inform and convince (deductive)</p> <p>Take a stance in the form of a thesis</p> <p style="text-align: center;">Has an audience in mind</p> <p>Uses logic as primary but not only rhetorical appeal</p> <p>Includes unique perspective and conclusion of arguer</p> <p>Applies known knowledge to reach a conclusion</p>	<p>To report on current literature, to discover (inductive) and convince (deductive)</p> <p>Originally question-based but takes a stance in the form of a thesis once the hypothesis is proven or disproven (the new knowledge)</p> <p>Uses data and ideas as evidence to support the claim that the knowledge is new</p> <p>Analyzes and interprets data and ideas</p> <p style="text-align: center;">Draws conclusion</p> <p style="text-align: center;">Has an audience in mind</p> <p>Includes unique perspective and conclusion of arguer</p>

 <p>Starts with a question</p> <p>Uses data and ideas as evidence to answer the question</p> <p>Analyzes and interprets data and ideas from experiment and/or sources</p> <p>Reaches a result that creates new knowledge</p> <p>Presents the new knowledge in the form of a thesis</p> <p>Uses logic as primary but perhaps not the only rhetorical appeal</p> <p>Applies knowledge to reach a conclusion</p>	 <p>Starts with a question</p> <p>Uses data and ideas as evidence to answer the question</p> <p>Analyzes and interprets data and ideas from experiment and/or sources</p> <p>Reaches a result that creates new knowledge informs the reader of that knowledge by summarizing data and ideas that led to the conclusion.</p>	 <p>Informs reader of knowledge on a topic by summarizing data and ideas from experiment and/or sources</p> <p>Information gathered leads to research question formulation.</p> <p>Uses data and ideas as evidence to show how the answer to the question is arrived upon</p>	 <p>Presents knowledge in the form of a thesis</p> <p>Uses logic as primary but not only rhetorical appeal</p> <p>Applies known knowledge to reach a conclusion</p> <p>Conclusion leads to formulation of a new question</p> <p>Uses data and ideas as evidence to answer the question</p> <p>Analyzes and interprets data and ideas from experience and/or sources</p> <p>Reaches a result that creates new knowledge</p>	 <p>Informs reader of knowledge on a topic</p> <p>Summarizes data and ideas from experiment and /or sources</p> <p>Presents the knowledge in the form of a thesis</p> <p>Uses logic as primary but not only rhetorical appeal</p> <p>Includes unique perspective and conclusion of arguer</p> <p>Applies knowledge to reach a conclusion</p>	 <p>Presents knowledge in the form of a thesis</p> <p>Uses logic as primary but not only rhetorical appeal</p> <p>Applies knowledge to reach a conclusion Expands general conclusion to address other contexts</p>
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### “Less Than Stellar” Example

**Example:** Suggested Learning Strategies: **Quickwrite, Think-Pair-Share, Graphic Organizer, Discussion Groups, Drafting**

**Assignment:** Your assignment is to write a multi-genre research project on a person, event, movement, or topic of interest to you as it relates to the American Dream.

#### Steps:

Choose a **prewriting** strategy to generate ideas that provide a focus for your topic (person, event, movement, concept, etc.) as it relates to the American Dream. Quickwrite an exploration of your thinking on the topic and identify areas that require further insight—this quickwrite could be used to focus your research.

1. **Think-pair-share** your findings to help you consider your ideas, narrow your focus, and generate a research question. Next, draft a working thesis that answers your focus question and that can be used as a guiding factor to guide your research and multi-genre research project.
2. Conduct **research** (7-8 primary and secondary sources) to explore all aspects of your thesis. Use the notetaking guide from Activity 5.20 to help collect information and plan your ideas. Use resources to assist with documenting your sources correctly in an annotated bibliography.

3. **Consider** which ideas from your research you will include in your paper, and choose an appropriate genre to creatively express the connection between your research and your interpretation. Remember, you will need a minimum of six different genres in your collection.
4. **Reflect** on research and ideas and brainstorm a list of creative ways to connect the genres via a metaphor or motif (e.g., chapters, seasons, time, movie script, song lyric, recipes, months of the year, colors in a rainbow, cartoons, visual art images, statistics, expository text, sports rules, etc.). Select an appropriate metaphor and consider how it connects to your thesis, research, genres, and ideas.
5. **Assemble** your writing pieces in a coherent order using the transitions (e.g., metaphor or motif) you select to guide your reader from one genre to the next.

**\*\* Highlighted sections show the attempt to conflate, confuse, hurry, and/or complicate the stages of an already complex process.**

## Examples of Separating Processes:

### Breaking Down Research Process Genres

#### Inductive Research Process



##### Assignment:

When using the Inductive Research Process, **start with an unanswered question on a topic that genuinely fascinates and engages you**. Then gather data and ideas that illuminate your subject matter. Your analysis and interpretation of the data and ideas then lead you to synthesize a set of answers to your question—new results that add to the body of knowledge in your field of research.

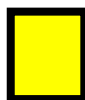
Your assignment is to write a multi-genre research project based on a research question involving the American Dream. The following are sample inductive research questions:

- How do [members of specific people group] conceive of and experience the American Dream?
- Is the American Dream still alive in rural America (or the West, etc.)?
- What is the “Millennial” version of the American Dream?

**Note:** These are all open-ended questions for which the researcher tries to find coherent answers using a synthesis of published data and ideas (OR data gathered from original research).

Your final project should **incorporate three to five genres** to display the data you have collected and the conclusions you have drawn from your analysis and interpretation of that data. Possible genres include: quotations, short essays, poetry, newspaper or magazine articles, still photography, film clips, audio files, posters, cartoons, graphics and schematics, animations, statistics, hyperlinks, etc. (Check with the instructor if you are unsure of a genre choice.)

#### Researched Report Process



##### Assignment:

When using the Researched Report Process, your purpose is to inform your audience of research that has been conducted to date on a specific topic or area of scholarly interest. To write this type of research report, you gather and summarize the data and ideas of others. To conclude, you analyze and interpret that data to present an overview or summation of what has been learned so far in the field of study.

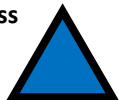
Your assignment is to write a multi-genre research report based on a topic involving the American Dream. The following are sample Researched Report topics:

- The American Dream through the eyes of [members of specific people group]
- The American Dream in rural America (or the West, etc.)
- The “Millennial” version of the American Dream

**Note:** These are all reports on how various groups view or experience the American Dream.

Your final project should incorporate three to five genres to display the data you have collected and the summaries you have written. Possible genres include: quotations, short essays, poetry, newspaper or magazine articles, still photography, film clips, audio files, posters, cartoons, graphics and schematics, animations, statistics, hyperlinks, etc. (Check with the instructor if you are unsure of a genre choice.)

### Deductive Essay Process



#### Assignment:

When using the Deductive Persuasive or Argumentative Essay Process, you take a stance in the form of a thesis statement and use established facts in combination with rhetorical appeals to inform and persuade your specific audience. Use data and ideas from your research to make convincing points that support your thesis statement, all with the purpose of guiding your audience to adopt your perspectives and conclusions as their own.

Your assignment is to write a multi-genre research essay with a thesis statement involving the American Dream. The following are sample titles and thesis statements:

- Not your “standard American Dream”; [Members of specific people group] conceive of and experience the American Dream in ways that diverge widely from the “typical” American Dream.
- Why the American Dream is dead in rural America (or the West, etc.); The American dream has died a slow and painful death in rural areas across the country.
- The Pseudo American Dream of “Millennials”; The American Dream for Millennials is only a façade of what that dream was for prior generations.

**Note:** These are all arguments about how various groups view or experience the American Dream and why.

Your final project should **incorporate three to five genres** to display the data and ideas you have collected in support of your thesis statement. Possible genres include: quotations, short essays, poetry, newspaper or magazine articles, still photography, film clips, audio files, posters, cartoons, graphics and schematics, animations, statistics, hyperlinks, etc. (Check with the instructor if you are unsure of a genre choice.)

1. Be sure to support the position you take in your thesis statement with reasons and evidence gathered from your research. Your rhetorical appeals should use logic (logos), have high credibility (ethos), and also appeal to the emotions of your readers (pathos). To make your arguments stronger, you should also consider and discuss objections that others may raise in response to your points.
2. Assemble your multi-genre pieces in a coherent order to support your thesis statement. The final result should guide your audience through your argument, point by point, until you reach the conclusion forecast in your thesis statement.

### Topic Examples

American Wedding Traditions	
Inductive	What American wedding traditions are “universal”?
Research Report	Three “Universal” American Wedding Traditions

<b>Deductive (thesis)</b>	THESIS:
<b>Inductive</b>	What are the origins of American wedding traditions?
<b>Research Report</b>	A History of American Wedding Traditions
<b>Deductive (thesis)</b>	THESIS:
<b>Inductive</b>	Are new American wedding traditions emerging in the 21 <sup>st</sup> century?
<b>Research Report</b>	The emergence of new American wedding traditions in the 21 <sup>st</sup> century.
<b>Deductive (thesis)</b>	THESIS:

<b>Poisonous Frogs of the Amazon Basin</b>	
<b>Inductive</b>	How do poisonous frogs interact physically without harming each other?
<b>Research Report</b>	Communication and Social Behaviors Among Poisonous Frogs of the Amazon Basin
<b>Deductive (thesis)</b>	THESIS:
<b>Inductive</b>	What kinds of parental care are exhibited in the various genera of poisonous frogs?
<b>Research Report</b>	Parental Care Behaviors Among Various Genera of Poisonous Frogs
<b>Deductive (thesis)</b>	THESIS:
<b>Inductive</b>	How do predator species learn to avoid poisonous frogs?
<b>Research Report</b>	Predator relationships and learning interactions with poisonous frogs in the Amazon Basin.
<b>Deductive (thesis)</b>	THESIS:



## Comprehensive Assignment:

### Step 1 \*



To introduce the reader to your field of research, begin by presenting a Literature Review. **The purpose of the Literature Review is to inform your audience of research that has been conducted to date in your area of scholarly interest.** To write this type of research report, you gather and summarize the data and ideas of others. To conclude, you analyze and interpret that data to present an overview or summation of what has been learned so far in your field of study.

### Step 2†

Your next step is to engage in the Inductive Research Process. **Use your knowledge of what had been done in the field so far as the launching point for an as-of-yet unanswered question in your area of scholarly interest.** Then gather data (from others or by conducting original research) and ideas that illuminate your subject matter. Your analysis and interpretation of the data and ideas then lead you to synthesize a set of answers to your question—new results that add to the body of knowledge in your field of research.

### Step 3#

Finally, use the Deductive Persuasive or Argumentative Essay Process to discuss the relevance of your results and the implications for future research and in various potential real-world applications. In this final step, you take a stance in the form of a thesis statement and use the established facts (from your research project) in combination with rhetorical appeals to inform and persuade your audience. Use data and ideas from your research to make convincing points that support your thesis statement, all with the purpose of guiding your audience to adopt your perspectives and conclusions as their own.

**\*See Writing a Multi-Genre Research Project Using the Process of Discovery for detailed instructions**

**†See Writing a Multi-Genre Research Report for detailed instructions**

**# See Writing a Multi-Genre Research Project Using Deductive Persuasion or Argumentation for detailed instructions**