A Research Playbook: Tools to Manage the Process While Enhancing Coherence and Creativity

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4 – 5:30
Introductions

Name
Degree Sought
How far along

Thesis or Dissertation
How far along

Welcome
– Live streaming students too
BA & MA Economics
PhD Public Administration (1977)

- 4 books
- 70 journal articles & book chapters
Supervise - Student Research

400++ Applied Research Projects

- Award Winning (national, regional)
- Cited (Journals, Books, United Nations Reports, Dissertations, Policy documents)
- Widely Downloaded Million ++
Views by Country last thirty days
A Research Playbook: **Tools to Manage the Process** While Enhancing **Coherence** and **Creativity**

- **Purpose**
- **Theory**
- **Method**
- **Data Analysis**
C – creative - Major breakthroughs

C – creative – Minor breakthroughs

New or novel ideas

New or novel connections

Process filled with light bulb moments
# Taxonomy of Cognitive Domain

<table>
<thead>
<tr>
<th>Domain</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remembering</td>
<td>Retrieving, recognizing, recalling</td>
</tr>
<tr>
<td>Understanding</td>
<td>Constructing meaning from written communication through interpreting summarizing, inferring</td>
</tr>
<tr>
<td>Applying</td>
<td>Using information/ideas in new context</td>
</tr>
<tr>
<td>Analyzing</td>
<td>Breaking material into parts and determining how the parts relate (classifying)</td>
</tr>
<tr>
<td>Evaluating</td>
<td>Making judgments based on criteria and standards</td>
</tr>
<tr>
<td>Creating</td>
<td>Putting elements together to form a coherent whole</td>
</tr>
</tbody>
</table>
Path of learning or understanding while doing a paper

Equilibrium with greater complexity
As scholar confronts the unexpected while doing the reading- confusion-doubt
Tools to manage the ‘doubt and confusion’ stage

Equilibrium with greater complexity

Tools to bring order to outer world and focus to bring coherence to creative process.

Transformations of Inquiry
Tools of Scholarly Research

1. Step by Step Notebook
   - Project Management
   - Time, Materials, Ideas

2. Conceptual Frameworks
   - Organize Ideas and Data
Notebook -

“Its my Playbook Dr. S”
Aside from project management

Build Skills

1. Reading Comprehension
2. Writing
3. Discipline
4. Organization – time, ideas
Common Problems

• Can’t find time to work on it for more than an hour

• After a while I lose my place and forget what I originally wanted to do
Build Skills

Project Management System

Organizing

- Materials
- Time
- Ideas

Strategic
2+ steps ahead
Addresses Binge Writing

• Common Form of Writer’s Block
• Wait till the last minute to do the paper
• Stress, sleeplessness
• Poor quality work
Organizes Materials

Tabs
• Things – to – do
• Notes
• Calendar
• Outline
• Draft
• Sources

https://1drv.ms/f/s!AlajKjDNj2KdgSGVyrpahzb2FqDZ

Like a Playbook

One Note electronic version
Things-To-Do List — Tab

- Project oriented - tasks for paper only
- Breaks the many tasks into small manageable pieces (15 minutes - hour)
- Keeps track of book chapter, articles etc.
- Links to notes
- **Emphasizes scholarly reading**
- Addresses procrastination - easy to return to work after a break
Things-To-Do List Emphasizes Reading and Thinking

Important to read widely.
Important to comprehend deeply.

Ideas for paper come from the literature and thoughts of scholar.

A person's writing ability is constrained by their reading comprehension.

It is impossible to write clearly about a subject you do not understand.
<table>
<thead>
<tr>
<th>Date completed</th>
<th>Task</th>
</tr>
</thead>
<tbody>
<tr>
<td>2/3/04</td>
<td>6. Read Feaver</td>
</tr>
<tr>
<td>2/10/04</td>
<td>7. Take notes Feaver</td>
</tr>
<tr>
<td>2/4/04</td>
<td>8. Read Cottey et al</td>
</tr>
<tr>
<td>2/9/04</td>
<td>9. Take notes Cottey et al</td>
</tr>
<tr>
<td>2/6/04</td>
<td>10. Read ch.1 Wilson</td>
</tr>
<tr>
<td>2/18/04</td>
<td>11. Take notes Ch.1 Wilson</td>
</tr>
<tr>
<td>2/6/04</td>
<td>12. Skim Ch2. Wilson</td>
</tr>
</tbody>
</table>
Notes - Tab

- Keep detailed notes in this section.
- Organize alphabetically by last name of author.
- Develops habit of writing.
- Builds reading comprehension.
- Ties directly to the integrated outline.
- Essential part of process - this is where the student really learns the new material.
Tips on Note-taking

• Be self-reflective when taking notes.
  ✓ Do you really understand what the material?
  ✓ Less you understand the more detailed the notes should be.
  ✓ Notes can be taken on computer or by hand.

• Be sure the author’s last name, year and page are on every page of the notes. Strategic!
Cottey et al 2002

p. 31

Says too concerned in lit about “threat of praetorian military intervention in domestic policies.”

Should “reconceptualize in terms of democratic governance of the defense & security sector.”

p. 32

Shifts focus to “the wider problem of the democratic mgt and implementation of defense & security policy.”

PART OF BUREAUCRACY - job to implement policy
Organizes Ideas - Innovation

Integrated Outline
- Before writing begins the outline incorporates the reading, notes, interviews
- Entire notebook builds to create the outline
- Conceptual Frameworks (p. 85 playbook)
Outline - Tab

Integrated Outline

✓ Outline that incorporates all of the notes.

✓ Begin drafting paper after integrated outline is complete

✓ Fewer frantic searches.
Integrated Outline example

Chapter - The Bureaucracy in Military Sociology (8-10 pages)

Purpose: “This chapter examines the intersection of military sociology and bureaucracy.”
The Bureaucracy in Military Sociology

I. Intro
   A. Set the stage/Weber ideal
   B. Purpose statement: This chapter examines the intersection of military sociology and bureaucracy
      1. Define mil sociology
      2. Interdisciplinary study bureaucracy

II. Military Bureaucracy
   A. Unique Definition-War
   B. Authority
   C. Leadership decisions

III. Recent Trends
   A. Bureaucracy and civil-military relations
      1. Mature democracies
      2. Emerging democracies
   B. New Roles

IV. Conclusion
Cottey et al 2002

Says too concerned in lit about “threat of praetorian military intervention in domestic policies.”

Should “reconceptualize in terms of democratic governance of the defense & security sector.”

Shifts focus to “the wider problem of the democratic management and implementation of defense & security policy.”

PART OF BUREAUCRACY - job to implement policy
The Bureaucracy in Military Sociology

I. Intro
   A. Set the stage/Weber ideal (Weber, Merton)
   B. Purpose statement: This chapter examines the intersection of military sociology and bureaucracy
      1. Define mil sociology (Siebold, H-J & Moskos)
      2. Interdisciplinary study bureaucracy Socio-(Mills)
         Political Sci (Allison)
         Policy science (Wilson)

II. Military Bureaucracy
   A. Unique Definition - War (Janowitz & Little p.27-28)

B. Authority (J&L p.27-28)
C. Leadership decisions (Allison)

III. Recent Trends
   A. Bur & Civil-military relations
      1. mature democracies (Feaver)
      2. emerging democracies (Cottey et al pp31-32)*
   B. New Roles (Mora, Parchomenko)

IV. Conclusion

*Paragraph slide 27 “Example”
Cottey et al. (2002) examine civil-military relations in the emerging democracies of post-communist Eastern Europe. Like Feaver (1996) they believe there is too much concern in the literature over the “threat of praetorian military intervention in domestic policies” (Cottey et al. 2002:31). They call for a reconceptualization of civil-military relations “in terms of the governance of the defense and security sector” and the “wider problem of the democratic management and implementation of defense and security policy” (Cottey et al. 2002:32).
Drafts - Tab

- Early drafts are kept here.
- Sculpture example.
- Edit on hard copy and then make the corrections.
- Aesthetic, calm location

Reminder:  https://1drv.ms/f/s!AlajKjDNj2KdgSVyrpahzb2FqDZ
Notebook is a tool to manage the ‘doubt and confusion’ stage
PART II. Conceptual Frameworks
Steps in Research Process

Project to Manage

Conceptual Frameworks

Role of Theory

Connections between Steps

Coherence
Football Metaphors
– doing empirical research

Scout

Training

Coach

Play
Astonishment
Why?

Organizes
- Time
- Materials
- Ideas

In Process Builds:
- Reading skills
- Thinking skills
- Writing skills
What is Theory?

“What theory can be defined as a coherent group of general propositions or as a verified explanation accounting for known facts or phenomena (theory of relativity or gravity)? Theories are used to explain reality or make predictions.” Johnson, 2010, p. 17
Theory:

summarizes a hypothesis or group of hypotheses that have been supported with repeated testing. A theory is valid as long as there is no evidence to dispute it. Hence, theories can be disproven. If evidence accumulated to support a hypothesis, then the hypothesis can be accepted as a good explanation of a phenomenon. One might say a theory is an accepted hypothesis.
Steps in Research Process

- Purpose
- Theory/hypotheses
- Method
- Data Analysis

How do I communicate??

Conceptual Framework

Type of **theory**
Plays are mental images/ideas that organize what players do on the ground in a particular situation.

Plays do not make sense without a **purpose**.

Plays are a kind of close to the ground Theory.
purpose

Long or short yardage

How men move on ground

Movement of players on ground

Results

Actual yardage gained

Play

ideas that organize player actions
Research Process Taking into account Traditional Research notions of Theory

Conceptual framework – close to the data theory
Steps in Research Process

1. **Purpose**
   - Emphasizes finding crafting research purpose/question

2. **Conceptual Framework**
   - Emphasizes building a Framework – literature review

3. **Method**

4. **Data Analysis**
Conceptual Framework: Organization of ideas to achieve a Purpose

Purpose → Conceptual Framework → Method → Data Analysis

Explanation → Hypotheses

Most common – definition of theory
What Explains the level of Wages?

Hypotheses
- Education
- Intelligence
- Job tenure

H1: As education increases wages increase
H2: As intelligence increases wages increase
H3: As job tenure increases wages increase
Explanation

What explains wages

Hypotheses

Education
Intelligence
Tenure

Method

Operationalize variables
Survey

RESTATE HYPOTHESES

Dependent variable – Wages (Hourly rate of pay $)

Independent variables Education (years of school completed) H1
Intelligence (IQ score) H2
Tenure (months on the job) H3
Purpose

Explanation (what explains wages)

Hypotheses

1: education
2: Intelligence
3: tenure

Method

Operationalize variables
survey

Statistics

Statistics used to test H1; H2; H3
(Regression; Correlation..)
There can be many types of purposes -- and Frameworks

Many Plays

Purposes

Explanation
Description
Exploration
Decision making
Gauging

Conceptual Frameworks

Hypotheses
Categories
Working Hypotheses
Models of operations research
Practical Ideal Type
<table>
<thead>
<tr>
<th>Purpose</th>
<th>Conceptual framework</th>
<th>Method</th>
<th>Data Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explanation</td>
<td>Hypotheses</td>
<td><strong>Quantitative</strong> Survey</td>
<td>Multivariate statistics</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Existing data</td>
<td>Regression, t-tests, correlation, ...</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Experimental design</td>
<td></td>
</tr>
<tr>
<td>Description</td>
<td>Categories</td>
<td>Survey (<strong>Quantitative</strong>) Content Analysis</td>
<td>Descriptive <strong>Statistics</strong> Mean, median, mode</td>
</tr>
<tr>
<td>Exploration</td>
<td>Working Hypotheses</td>
<td><strong>Mostly Qualitative</strong> Case study, interviews, focus groups, direct observation…</td>
<td><strong>Evidence</strong> analyzed by working Hypotheses</td>
</tr>
<tr>
<td>Gauging</td>
<td>Practical ideal type</td>
<td><strong>Mostly Qualitative</strong> Case study, interviews, focus groups, direct observation…</td>
<td><strong>Evidence</strong> analyzed by criteria of practical ideal type</td>
</tr>
<tr>
<td>Decision Making</td>
<td>Models of operations research</td>
<td>Cost benefit analysis, cost effectiveness analysis, linear programing ……</td>
<td>Depends on the technique used</td>
</tr>
<tr>
<td>Purpose</td>
<td>Conceptual framework</td>
<td>Method</td>
<td>Data Analysis</td>
</tr>
<tr>
<td>------------------</td>
<td>----------------------</td>
<td>---------------------------------------------</td>
<td>-------------------------------------------------------------------------------</td>
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<tr>
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<td>Survey</td>
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<td></td>
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<td>Regression, t-tests, correlation,...</td>
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<td>Content Analysis</td>
<td>Mean, median, mode</td>
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<td>Working Hypotheses</td>
<td>Mostly Qualitative Case study, interviews,</td>
<td>Anything goes</td>
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<td></td>
<td></td>
<td>focus groups, direct observation...</td>
<td></td>
</tr>
<tr>
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<td>Models of operations</td>
<td>Cost benefit analysis, cost</td>
<td>Depends on the technique</td>
</tr>
<tr>
<td></td>
<td>research</td>
<td>effectiveness analysis, linear programing ...</td>
<td>used</td>
</tr>
<tr>
<td>Gauging</td>
<td>Practical ideal type</td>
<td>Mostly Qualitative Case study, interviews,</td>
<td>Evidence analyzed by practical ideal type category</td>
</tr>
<tr>
<td></td>
<td></td>
<td>focus groups, direct observation...</td>
<td></td>
</tr>
</tbody>
</table>

**Traditional Methods Texts**

*By Patricia M. Shields & Nandhini Rangarajan*
Conceptual Framework Table

Links framework to Literature

Operationalization Table

Links framework to modes of data collection
Handouts

What explains home fires?

College graduates attitudes Toward high stakes testing.
Table 7.1 Factors Explaining Residential Fire across Eight Studies (Huang 2009, p. 26)

<table>
<thead>
<tr>
<th>Study</th>
<th>Year</th>
<th>Residential fire Rate</th>
<th>Independent Variables that achieved statistical significance used in studies on residential fire*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schaanman et al</td>
<td>1977</td>
<td>Intra-city</td>
<td>+ - +</td>
</tr>
<tr>
<td>Karter &amp; Donner</td>
<td>1978</td>
<td>Intra-city</td>
<td>+ - + - +</td>
</tr>
<tr>
<td>Donnell</td>
<td>1980</td>
<td>Intra-city</td>
<td>+ - +</td>
</tr>
<tr>
<td>Munson &amp; Oats</td>
<td>1977</td>
<td>Intra and inter-city</td>
<td>+ - - + + - +</td>
</tr>
<tr>
<td>Gunther</td>
<td>1981</td>
<td>Intra-city</td>
<td>- +</td>
</tr>
<tr>
<td>Fenner</td>
<td>1990</td>
<td>Intra-city</td>
<td>+ - +</td>
</tr>
<tr>
<td>Goetz</td>
<td>1991</td>
<td>Intra-city</td>
<td>+ - + - +</td>
</tr>
<tr>
<td>Jennings</td>
<td>1996</td>
<td>Intra-city</td>
<td>+ - +</td>
</tr>
</tbody>
</table>

*Independent variable codes: 1 = Poverty rate; 2 = Parental presence; 3 = Under-Education; 4 = Family Stability; 5 = Crowdedness; 6 = percent owner; 7 = Vacancy Rate; 8 = Income; 9 = Unemployment rate; 10 = Percent of non-white; 11 = Housing Conditions; 12 = Temperature; 13 = Property Value; 14 = Age of Structure; 15 = Population under age 5
Figure 7.4 The Shape of an outline incorporating the Conceptual Framework

Big Picture Structure of a Chapter outline that would build a Conceptual framework

- Purpose of section
- Key definitions
- History
- Problem that needs framing

Introductory Material

Elements of Framework

Category 1
- Element 1.1 add literature
- Element 1.2 add literature
- Element 1.3 add literature

Category 2
Category 3
Category 4
Category 5
Where do Conceptual Frameworks come from?

• Literature Review Chapter
  Project Management skills

• Creativity Chapter

  Like coach that creates
  Plays
Former Student

Brought his notebook To event.

Work on paper during Down time.

September 2018
You will be judged by how well you write because nobody really knows how well you think  
(Gray, 1998, 140)

Critical Thinking

- Application
- Analysis
- Evaluation
- Creating
Classical Pragmatism as intellectual source for workshop


Emphasis on Tools of Inquiry
A Playbook for Research Methods
Integrating Conceptual Frameworks and Project Management
By Patricia M. Shields & Nanchini Rangarajan

Drawing

Questions????
Bibliography


Useful Web Sites

• Provides guidelines for writing a prospectus that use conceptual framework table and operationalization table.
  http://uweb.txstate.edu/~7Eps07/documents/prosdirect.pdf

• Examples of prospectus organized by type of conceptual framework
  http://uweb.txstate.edu/~7Eps07/documents/proexam.pdf

• Syllabus of class that gets students ready to write their Applied Research Project
  POSI 5335 Problems in Research Methodology

• Syllabus of class where students write their Applied Research Project
  POSI 5397 Applied Research Project

• 480 + Texas State student papers
  http://ecommons.txstate.edu/arp/

• Shields Home Page
  http://uweb.txstate.edu/~ps07/
Classical Pragmatism Sources


