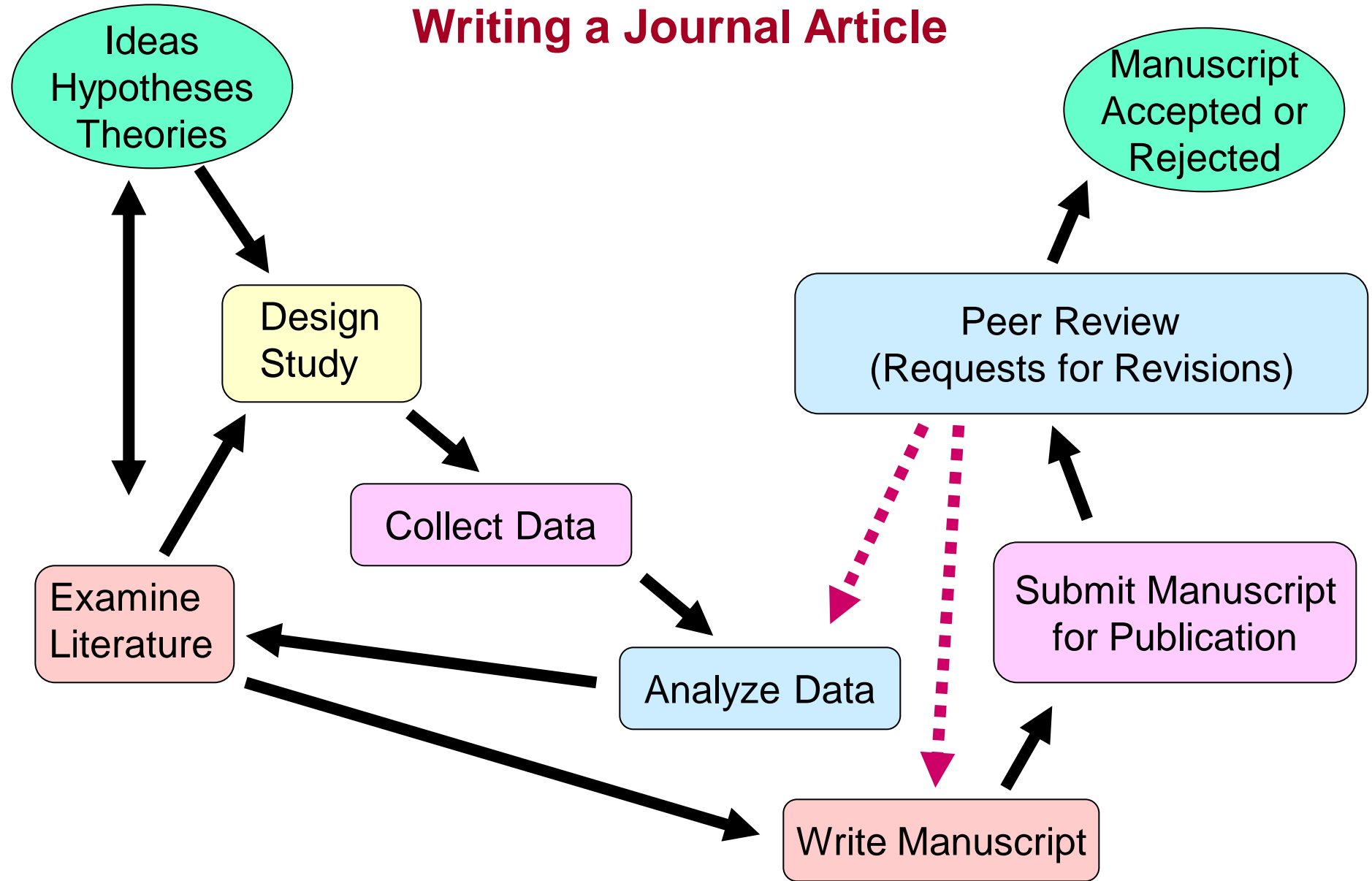


# **KINE 601**

## **The Research Journal Article**

**Reading: Huck pp 2 - 16**

# The Process Involved in Writing a Journal Article



# Research Journal Articles and the Academic Department

- Research Journals - different importance - impact factors
  - The more important the journal, the more difficult to get published
    - Impact factors - index of the # of citations from articles from a journal
      - published by the Institute for Scientific Information (ISI)
      - published in "Journal Citation Reports"
      - Note: MANY journals are not rated by the ISI and don't have impact factors
      - [Read more about impact factors](#)
    - Impact factor calculation for a given journal published in ISI:
$$\frac{\text{\# of citations in ISI journal in year } x \text{ for years } x-1 \text{ and } x-2}{\text{total \# of papers published in that journal in years } x-1 \text{ and } x-2}$$
  - Politics and ethics of research publication
    - competition among researchers for top journal publications
      - friends on editorial boards
      - should national reputation of a scholar preclude peer review ?
- Academic department - tenure, promotion, merit pay
  - grants & contracts are important as well as publications
  - teaching plays a minimal role - given lip service but has little value
  - what is the true purpose of university?
    - generate knowledge or disseminate knowledge ?

# Components of a research journal article

- Title
- Authors
- Abstract
- Introduction
- Methods
- Results
- Discussion
- Acknowledgements
- References

# Title & Authorship of a Journal Article

- Title

- stated in as few words, characters, and spaces as possible
  - most journals have limits

- Author Line

- who should be on author line and in what order ?
  - first author - usually, actual writer of the paper - does the most work
  - last author - sometimes, director of the lab where research was done
  - only those making "significant" contributions should be included
    - those that gather the data ? (graduate students ?)
    - statistician ?
    - proofreader or editor ?
    - director of lab where research is done ?
    - colleagues ?
- data ownership
  - who "owns" the data once it has been collected ?

# Components of a Journal Article

## ● Abstract

- integral part of theses / dissertations
- summarizes the study - provides reader with overview
- contains: purpose, methods (subjects), results, conclusions
- normally 150 - 200 words (# of words usually mandated by journal)
- usually set off from the body by different font, font size, or italics
- many times contains the "citation" - if not, it should be on page(s)
  - journal name, publication year, volume #, issue #, page numbers

## ● Introduction – background, rationale, and purpose of the study

- Introduction in theses / dissertations is expanded (chapter 1)
- background and rationale (justification for study)
  - citations connecting and relating the present study with past work
  - some contain a mini lit. review - others simply skip to the purpose statement
  - complete literature review for theses / dissertations (chapter 2)
- purpose of the study (formal hypothesis in theses / dissertations)
  - clear question(s) to be answered - should be described in detail

# Components of a Journal Article

- **Methods** (Chapter 3 in theses / dissertations)
  - explains all facets of how study was conducted
    - "how" the researcher is going to arrive at an answer to the question(s)
  - should contain enough information as to enable replication of study
  - **SUBJECTS** section:
    - selection method, dropouts (mortality), informed consent information
    - important because it relates to "generalizability" of study results
  - **INSTRUMENTATION & MATERIALS** section
    - description of things other than subjects used to conduct the study
      - apparatus, questionnaires, biochemical assay techniques, etc.
  - **PROCEDURES** section
    - detailed account of what was done to the subjects and when
      - description of the sequence of events involving:
        - 1. manipulation of the independent variable (if there is one )
        - 2. the gathering of the information related to the dependent variable
      - note: the procedures and the instrumentation sections may be intertwined and may not be distinguishable

# Components of a Journal Article

## ● Results (Chapter 4 in theses / dissertations)

- a description of the study outcomes (statistical findings)
- tables listing means & variability of the dependent variable
  - minimally, means & some measure of variability should always be included
- figures, charts, and graphs illustrating what is contained in the text
  - general results explained in text, specifics in tables & illustrations

## ● Discussion/Conclusions (Chapter 5 in theses / dissertations)

- what results mean in regard to answering the research question
  - conclusions - generalizations
- why the researcher thinks the results turned out as they did
- how the results relate to or "fit in" with previous findings
- suggestions for directions of future research



# Components of a Journal Article

- Acknowledgements

- tribute to those contributing to project that are not on author line
  - secretaries, typists, technicians, graduate students
- recognition of funding agency(ies) that made the project possible

- References

- Citations used in the text
  - Article title, Journal / Book name, publication year, volume #, issue #, page numbers, editors, and other relevant publication information
- Formatted according to "information for authors" for particular journal
  - almost all journals have their own format for entire paper
  - many journals list information for authors on a website or they are contained in selected issues of the journal (January & June issues)