

# FROM RESEARCH QUESTIONS TO CITATIONS: WHAT ARE “DISCIPLINARY WAYS OF KNOWING”?

HUMANITIES	SCIENCES	EXPRESSIVE ARTS		SOCIAL SCIENCES
English, Art & Art History, Modern Languages, Philosophy, History, Cultural Studies	Chemistry, Biology, Physics, Computer Science, Math, Psychology	Theater, Studio Art, Dance, Music		Anthropology, History, Political Sciences, Communication, Sociology, Business, Psychology
WHAT KINDS OF QUESTIONS DO SCHOLARS & STUDENTS ASK?				
How do we make meaning out of human experience?	What can we learn about the natural world?	How do we express human experience?		How do we understand human behavior; how do social systems structure our lives?
HOW DO SCHOLARS & STUDENTS APPROACH/ANSWER QUESTIONS? (METHODOLOGY)				
Evidence = artifacts of human culture— <i>texts</i> .  Close Reading = careful observations of textual details (patterns, connections, etc.) to construct meaning, to make claims about cultural value.  Theoretical frameworks (i.e. Feminism, New Historicism, Marxism, etc.) = help focus questions and make meaning of evidence.	Scientific Method =  1. Observe natural phenomena  2. Ask a research question  3. Formulate a hypothesis  4. Test the hypothesis  5. Report the results	Identifying a problem = a client’s request, a societal need, artist’s own invention.  Problem should be significant (impacts individual, communities, society), understandable/definable, open to experimentation through artist’s medium  Ideas often come from seeing surroundings in new ways, for example transforming a common object.  Analysis of and experimentation with preceding works/styles.		Iterative approach= Questions guide data collection (qualitative and/or quantitative, see below) and influence claims made  Quantitative Methods = numerical data & statistical analysis  Qualitative Methods = observation, interviews, text, ethnography, reporting human experience  Theoretical frameworks (i.e. Feminism, New Historicism, Marxism, etc.) = help focus questions and make meaning of evidence.
HOW DO SCHOLARS & STUDENTS SHARE THEIR WORK?				
Writing is thesis-driven = makes and supports a debatable, interpretative claim. Ideas reflect individual’s position.  Structure = Intro, Body, Conclusion  Style reflects goals of argumentation and focus on author = active voice, descriptive, figurative, rhetorical language, sources quoted, MLA, Chicago Manual of Style	Writing is hypothesis-driven = writing reflects methods & future replication. Others’ work synthesized as basis for inquiry.  Structure = IMRaD (Intro, Methods, Results, Discussion)  Style reflects goals in replicability and focus on data = passive voice, objective, detailed/precise, field-specific jargon, sources paraphrased/synthesized, APA	<u>Performers</u>  Live performance or the creation of an artistic project reflecting interpretive decisions based on research and cultural context.	<u>Researchers</u>  Writing is thesis-driven = makes and supports a debatable, interpretative claim. Ideas reflect individual’s position.  Style reflects goals in goals in research design and focus on diverse data detailed/precise, field-specific jargon, sources paraphrased/synthesized, Chicago/Turabian.	Writing is research question and/or hypothesis-driven = Findings are discussed as cases or populations.  Quantitative Studies = IMRaD. Qualitative = narrative  Style reflects goals in research design and focus on diverse data (either select cases or patterns within population) = objective, hedging, detailed/precise, field-specific jargon, sources paraphrased/synthesized, tables/graphs, APA

## IN-TEXT CITATION BY DISCIPLINE: THE PRINCIPLES BEHIND THE PUNCTUATION

You may have found professors rattling off a series of letters in their writing assignments: MLA, APA, Cell, Chicago. These different standards aren't secret codes intended to confuse you; they reflect important principles in how different academic fields (disciplines) pursue and transmit knowledge. The following examples don't cover all of the complexities—your instructor or a web guide will do that (e.g. Purdue's OWL site). Instead these examples suggest some of the big ideas behind a seemingly little thing like whether you include a date or a quotation mark.

APA (American Psychological Association)	psychology, education, business, some science courses
As public tolerance toward homosexuality increased, individual support for marriage equality was also likely to increase (Armenia and Troia, 2017, p. 193).	<ul style="list-style-type: none"> <li>• Elevates author, date, and page to your in-text citation (not just works cited page)</li> <li>• Privileges current sources, values recent research/theories</li> <li>• Often uses past tense verbs—real events in the past</li> <li>• Analysis often takes a side in an ongoing debate or adds new data to confirm or challenge a theory</li> </ul>
MLA (Modern Language Association)	humanities, English, media/cultural studies, the arts
"Even as a little boy," Chinua Achebe writes, Okonkwo "had resented his father's failure and weakness" (13).	<ul style="list-style-type: none"> <li>• Author and page numbers are essential, date in works cited</li> <li>• Older sources acceptable, often considered foundational</li> <li>• Seeks cleanest possible incorporation of quoted material, values most the paper writer's original interpretation</li> <li>• Uses present tense—literary events exist in an eternal present</li> <li>• Quotes exact phrase and uses this quote as the object of interpretation—lack of quotations would be a red flag</li> <li>• Expects at least 2x your own analysis to quoted material</li> </ul>
Chicago Manual of Style (aka Turabian)	anthropology, art history, history, politics
<p>An archeological excavation of cemeteries for the bodies of "the unworthy" poor reveals that many of the coffins had affixed to them small, cheap, mass-produced ornaments.<sup>1</sup></p> <p>1. Edward L. Bell, "The Historical Archeology of Mortuary Behavior," <i>Historical Archeology</i> 24 (1990): 54-78. Bell argues that the differential distribution of cheap coffin ornamentation does not reflect differential social status, but rather the spotty market availability of such products.</p>	<ul style="list-style-type: none"> <li>• Uses footnotes to expand on <i>history</i> and <i>context</i> (in addition to citation)</li> <li>• Thorough citation is highest value—any text referenced must receive a footnote, participating in scholarly conversation</li> <li>• Blends direct quotes, paraphrase, and summary</li> <li>• Splits between "Note and Bibliography" (NB) and "Author-Date" (AD); AD is more common in the social sciences where more current secondary material is most important</li> </ul>
Scientific Writing	
<p>Both ribonucleases and bifunctional nucleases are present in the pitcher fluid of the carnivorous plant genus <i>Nepenthes</i> (Stephenson and Hogan 2007).</p> <p>-OR-</p> <p>Stephenson and Hogan (2007) showed the presence of ribonucleases and bifunctional nucleases in the pitcher fluid of the carnivorous plant genus <i>Nepenthes</i>.</p>	<ul style="list-style-type: none"> <li>• No directly quoted material allowed, facts/data is more important than phrasing in the source text</li> <li>• Emphasizes author and date, values recent work</li> <li>• Multiple authors are common and the order an author is listed signifies their contribution to the work</li> <li>• "I" is possible—best papers tell a story about your discovery</li> <li>• Avoid emotional responses and unnecessary adjectives, objectivity and data are paramount</li> <li>• The goal is concise and precise writing</li> </ul>