

Quality and Engaging Student Research Projects:

A Student Development Theory Approach

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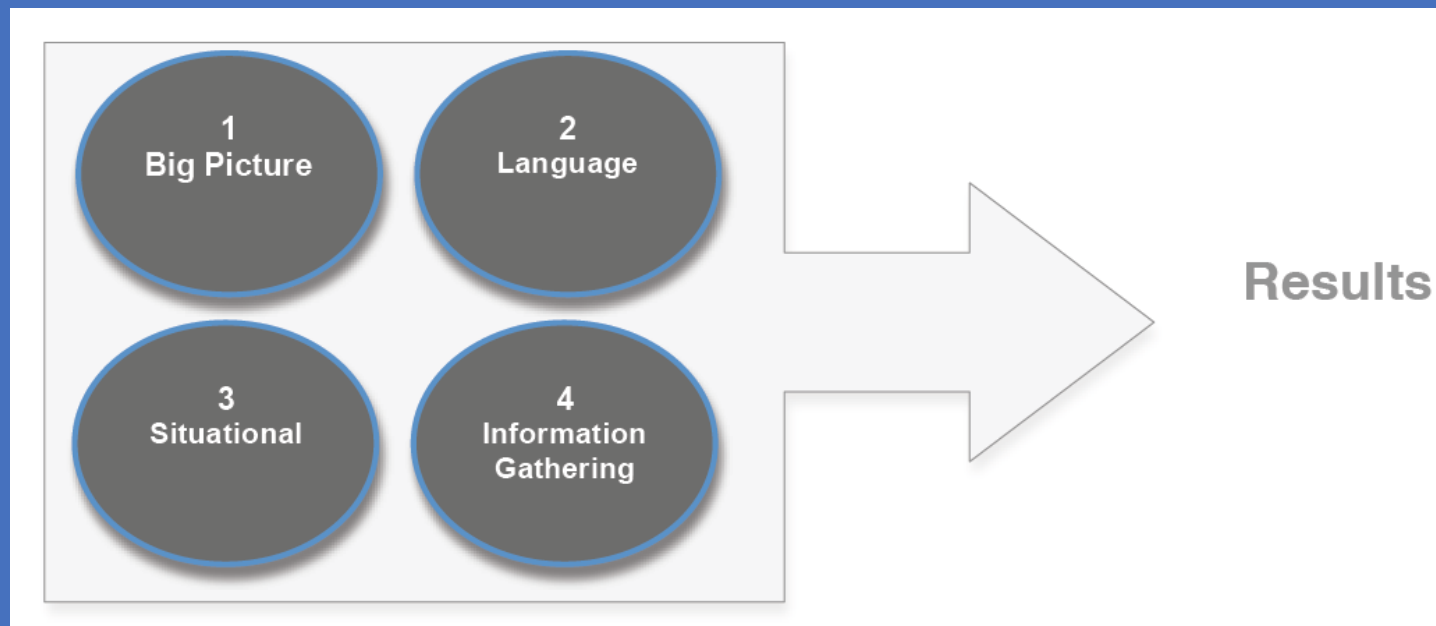
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Setting the Context

- ▣ Faculty Learning Community for Exploring Student Information Competency
 - 8 years; ~100 members (including 85+ faculty)
 - Students and quality research
 - Assignment/Partnership based

How Students Conduct Research

Four stages for finding context



"Finding Context: What Today's College Student Say about Conducting Research in the Digital Age,"
Alison J. Head and Michael B. Eisenberg, Project Information Literacy Progress Report, University of
Washington's Information School, February 4, 2009

Top Five Frustrations

- ❑ Information overload (e.g., the more you know, the less you know)
- ❑ Too much irrelevant information, can't locate what is needed from online results.
- ❑ Beginning and getting started on an assignment.
- ❑ Trying to find the "perfect source."
- ❑ Not knowing what to look for, yet still sifting through articles that might fit.

Student Perceptions Tool

When you need information for a paper, how often do you use the following resources?

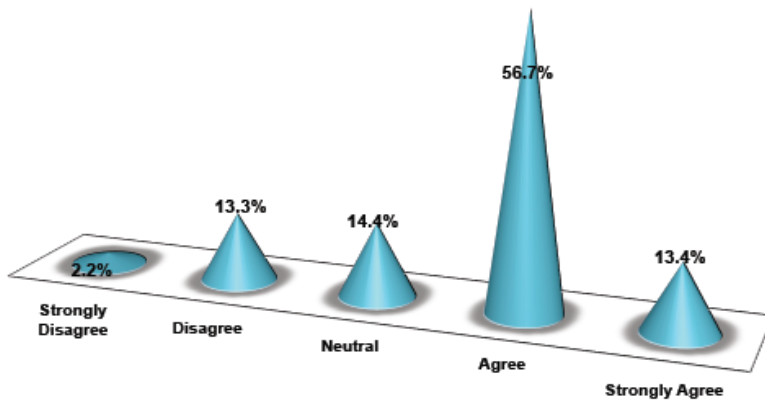
	Rarely	Sometimes	Regularly	Frequently	All the time
Librarian					
Professor/TA					
Friends or colleagues					
Google (or another search engine)					
Google Scholar					
Library Resources (Books, Videos, Journals)					
Course Textbook					
Wikipedia					

Please think about the work you do for your research assignments and indicate whether you agree or disagree with the following statements:

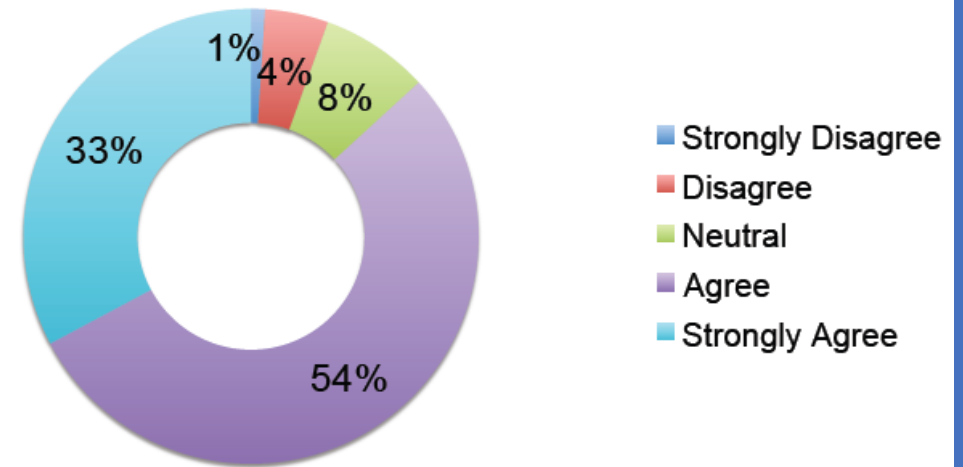
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Don't Know
I am prepared to do library research.						
I am confident in my ability to use library resources.						
Conducting library research is not relevant to me or my classwork.						
My instructors place too many restrictions on the types of resources I may use.						
I understand why my instructors place restrictions on the types of resources I may use.						
When I am doing research, I generally believe most information I find.						
The amount of information that I find overwhelms me.						
I am confident citing the information I use for research projects.						
The skills I have used to find scholarly information in one class can be utilized in other classes.						
The skills I have used to find scholarly information can be utilized in a job setting.						
Wikipedia is a source of scholarly information.						
I prefer using online resources over resources available only in print.						
I plan a search strategy before I begin to look for information.						
I have located and used resources at the library.						
I experience difficulties when I begin to find information for a research paper or project.						
I understand the difference between quoting, summarizing, and paraphrasing.						

Results

Google is the first place I look for information.

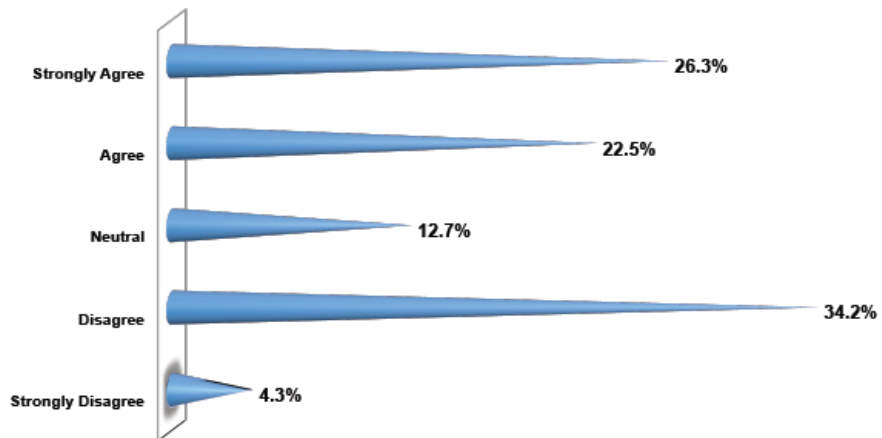


I am confident in my ability to use technology.

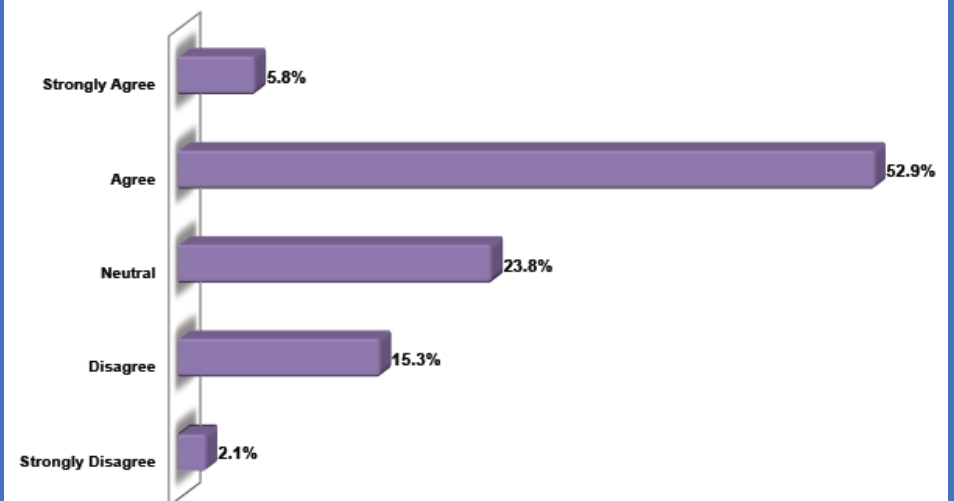


Results

I understand the difference between summarizing, quoting, and paraphrasing.



I generally believe most information I find.



Information Literacy Components

- ▣ Tangible
- ▣ Developed over time
- ▣ Six different steps in each
- ▣ Outcomes & best practices

Competency Levels:	Information Literacy Components					
	<i>ACRL 1: Defines and articulates the need for information</i>	<i>ACRL 2: Accesses needed information effectively and efficiently</i>	<i>ACRL 3: Evaluates information and its sources critically and incorporates selected information into his or her knowledge base and value system</i>	<i>ACRL 4: Uses information effectively to accomplish a specific purpose</i>	<i>ACRL 5: Understands many of the economic, legal, and social issues surrounding the use of information and accesses and uses information ethically and legally</i>	
	Framing the Research Question	Accessing Sources	Evaluating Sources	Evaluating Content	Using Information for a Specific Purpose	Understands Contexts and Ethics of Information Use
Foundation	- Begins to understand the value of finding evidence to support ideas and opinions	- Identifies keywords, synonyms, and related terms to describe information need effectively	- Understands that there are differences (quality, structure, verbiage, etc.) in sources of information	- - Explores the perspective/bias of sources	- Organizes informational content to support the purposes of the student's product - Understands the difference between quoting, paraphrasing, and summarizing	- Understands what constitutes plagiarism -
Thematic Intermediate	- Recognizes that knowledge can be organized into disciplines that influence the way information is presented and accessed, and that much knowledge crosses disciplines (i.e. interdisciplinarity)	- Understands basic structured search methods including Boolean logic	- Reviews information retrieved to assess the reliability of the source using multiple criteria - Understands the relative value and differences in sources and formats of information (e.g. book, website, multimedia, data set, visual, etc.)	- Develops the ability to analyze information and evaluate relative points of view -Identifies an author's thesis/main point and basic structure of the information	- Effectively organizes informational content to support the purposes of a product using multiple sources - Develops the ability to quote, paraphrase, and summarize information appropriately	- Cites information in proper style based on course/discipline requirements
Capstone Gateway?	- Demonstrates the ability to refine topics after reviewing retrieved information - Articulates a focused research question	- Uses advanced searching techniques, thesauri, and other tools to focus searching that may be unique to each source - Identifies appropriate discipline-specific and general indexes and databases needed to find relevant information -Utilizes citation searching resources to identify other frequently cited works	- Modifies search strategies to ensure that information retrieved is comprehensive enough to address the issue at a level appropriate for a senior	- Develops ability to integrate and organize knowledge.	- Blends research within multiple formats to expand upon current research	- Understands the fundamentals of copyright and free use.

Foundation

- ▣ Evidence
- ▣ Finding keywords
- ▣ Different kinds of sources
- ▣ Quoting vs paraphrasing
- ▣ Plagiarism
- ▣ Best practices

Thematic (Intermediate)

- ▣ Disciplines and interdisciplinarity
- ▣ Evaluation
- ▣ Quoting & paraphrasing
- ▣ Discipline-specific style guidelines
- ▣ Best practices

Capstone (Gateway)

- ▣ Refine & focus
- ▣ Use the appropriate databases & search techniques
- ▣ Understand copyright & free use
- ▣ Best practices

Introducing Student Development Theory: From Perry to Baxter Magolda

- ▣ Foundational research done by William G. Perry, first published in his 1968 *Forms of intellectual and ethical development in the college years*
- ▣ Outlines nine positions in a schema whereby a person begins by simplistically interpreting the world in in polar terms of absolute right and wrong, good or bad and ends by affirming personal commitments “in a world of contingent knowledge and relative values”
- ▣ Shift from dualist thinking to relativist thinking

Robert Kegan's *Evolving Self*

Six Developmental Stages of Mental Complexity involving "the developing person's distinction between self and other, or...between subject and object"

Stage 0 – Incorporative

Stage 1 – Impulsive

Stage 2 – Imperial/
Instrumental

Stage 3 – Interpersonal/
Socialized

Stage 4 – Institutional/Self-
Authoring

Stage 5 – Inter-Individual/
Self-Transforming

Kegan, Robert. "Making Meaning: The Constructive-Developmental Approach To Persons And Practice." *Personnel & Guidance Journal* 58.5 (1980): 373

Pruyn, Peter. "An Overview of Constructive Developmental Theory (CDT)." *Developmental Observer Blog*. N.p., 09 2010. Web. 11 Nov 2012. <<http://developmentalobserver.blog.com/2010/06/09/an-overview-of-constructive-developmental-theory-cdt/>>.

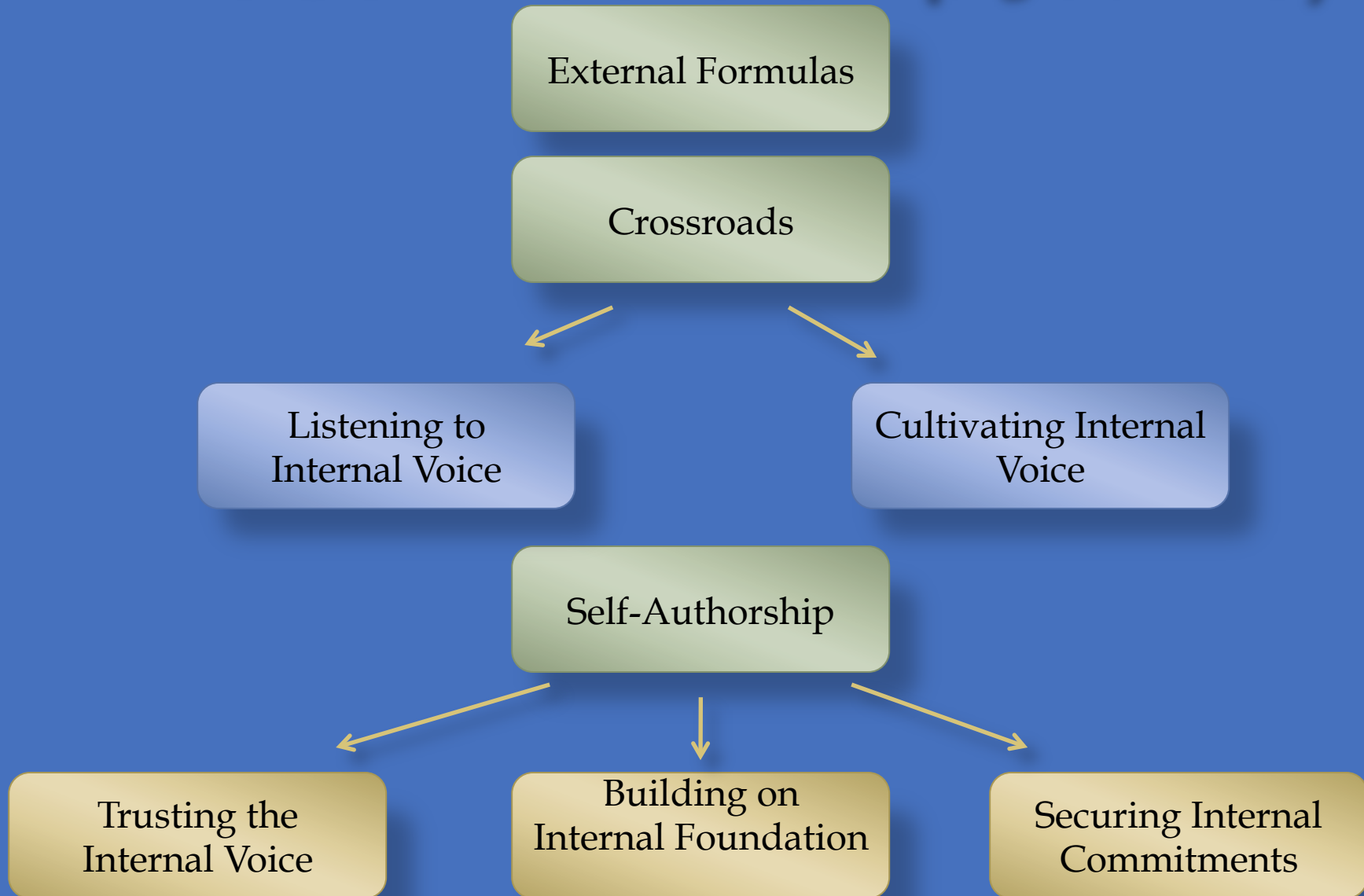
Marcia Baxter Magolda's Theory of Self-Authorship

- ▣ Defined by the shift from accepting knowledge from authorities to constructing knowledge [oneself], made possible by a shift from defining [oneself] through others' perceptions to defining [oneself] based on internally constructed values.
- ▣ Based on her longitudinal study of Miami University students, self-authorship begins to happen toward the end of the college years, most evident in late 20s and early 30s

Baxter, Magolda M. B. *Creating Contexts for Learning and Self-Authorship: Constructive-Developmental Pedagogy*. Nashville: Vanderbilt University Press, 1999.

Baxter, Magolda M. B. *Authoring Your Life: Developing an Internal Voice to Navigate Life's Challenges*. Sterling, Va: Stylus Pub, 2009.

The Self-Authorship Journey



Three Elements of Self-Authorship

All elements depend on the balance of intrapersonal and interpersonal dimensions, including

- ▣ Faith in one's knowledge system
- ▣ Construction of an inner psychological life
- ▣ An ability to regulate one's relationships with others to maintain identity

Baxter, Magolda M. B. *Creating Contexts for Learning and Self-Authorship: Constructive-Developmental Pedagogy*. Nashville: Vanderbilt University Press, 1999: 39.

Translating this to Research and Research Assignments

- ▣ You can't assume everyone is at the same developmental level because of class level or standing.
- ▣ But...how do you figure it out??
- ▣ And...how do you rethink assignments based upon what you find out?

Figuring it all out

- ▣ Easy, but hard to keep track
 - Student interactions
 - Intermediate evaluations
- ▣ Easy, but hard to collate
 - Survey tools and questionnaires
- ▣ Easy, and easy to collate
 - Biographical writing prompt
 - ▣ What academic or professional issues, fields, problems and topics most intrigue you?
 - ▣ What ideas, books, courses, or events have had the most impact on you?

Now what?

- ▣ Crafting assignments that meet most student needs, but still push them a bit.
- ▣ Flexibility for those with different developmental frameworks
- ▣ Tweaks and small changes suffice in most cases!

Struggle 1: Source Requirements

- ▣ External Formula students 'need' you to provide some structure.
- ▣ Crossroads may want more flexibility.
- ▣ Some suggestions
 - General guidelines plus wiggle room
 - Holistic view of sources
 - Discuss why different types of sources are important

Struggle 2: Evaluating Sources

- ▣ Structure is needed at all levels (but...)
- ▣ External Formulas: CRAAP test, or the 5 Ws
- ▣ Crossroads: Research Journal (i.e. critically thinking about the searching)

Struggle 3: The 'Right' Sources

- ▣ Be careful with suggestions.
- ▣ “Look here”. “Google is bad.” “You cannot use web sources”. NOT HELPFUL!
- ▣ Demonstrate the value of source via the student’s contextual knowing.
- ▣ Suggest methods rather than specific sources.
- ▣ Create partnerships!

Struggle 4: Using the Ideas of Others

- ▣ Quoting is 'easy', but why summarize when someone else has done it already (and better?)
- ▣ Be very clear with your expectations (especially for external formula students)
- ▣ Students often need extensive work with summarizing and paraphrasing
- ▣ Revisions!
- ▣ Partnerships!!

Struggle 5: NO TIME.....

- ▣ Do I have to grade another research paper??
- ▣ Peer review/grading
- ▣ Creative projects (and their pitfalls)
 - Infographics
 - Wikipedia articles
 - Posters

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