

# **Understanding Identity through Writing: Foundational Knowledge, Critical Thinking, and Professional Identity in Four Disciplines**

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Conference

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# We are St. John's

- Second most diverse college in America
- Located in Queens, NY
- 44% are Black, Hispanic, Asian, Native Hawaiian/Pacific Islander, American Indian, Alaska Native, or Two or More Races
- Students come from 47 states, the District of Columbia, Puerto Rico, US Virgin Islands and 123 countries
- 1,208 Non-resident (International) Students come from 106 countries
- 43% Pell Grant eligible
- 97% receive financial aid
- <http://colleges.usnews.rankingsandreviews.com/best-colleges/rankings/national-universities/campus-ethnic-diversity>



ST. JOHN'S  
UNIVERSITY

# Research questions

In the context of our student population, how does writing and using evidence help students across their college years...

1. Develop foundational and advanced knowledge and skills
2. Develop and explore their social and professional identities

# Background for the study

- Participated in the Writing Fellows program
- Active in assessment and writing studies within individual departments
- This group has presented results from this research at previous conferences

# Participants

- Phyllis Conn and Michael Benjamin – First year seminar in the core curriculum
- James Croft – Second year legal writing course
- Joseph Serafin – Third year chemistry lecture and laboratory
- Rebecca Wiseheart – Fourth year speech pathology course

# Results from IWAC 2014 study

- Informal writing offers insight into student thinking and attitudes and allows for intervention
- Students saw value in writing tasks in mastering course content and developing professional identity
- Students connected writing tasks with developing critical thinking skills and personal development
- Professional identity seems to develop through coursework but not through conscious curricular planning

# Project Overview

How students use evidence in their writing

Examined at several points through the semester

Connections with:

- Critical thinking
- Standards of particular disciplines (professional identity)
- Foundational skills and knowledge
- Metacognition (reflection through the semester)

# Methodology: Writing Tasks and Questionnaires

Clinical documentation; lab reports

Scaffolded writing assignments

Double entry journals

Semester-long projects

Questionnaires – beginning and end of semester

Reflections about writing



# Methodology and Analysis

Semantic analysis of questionnaires, reflections

Review/comparison of skills using evidence at several points through the semester

Review/comparison of using evidence in different types of writing tasks

Monthly meetings to discuss progress, preliminary results, methodologies

# Connections to Literature – WAC and Disciplinary Studies

- “Contributions of Writing to Learning and Development....” (Paul Anderson et al)
- “If Skills Are the New Canon, Are Colleges Teaching Them?” (Dan Berrett)
- “Small Changes in Teaching: Making Connections” (James Lang)
- “Trends in Research on Writing as a Learning Activity” (Perry Klein and Pietro Boscolo)
- Pedagogical literature in our disciplines – i.e., “Writing to Learn in Undergraduate Science Education....” (Julie Reynolds et al)

# **Discover New York**

(A required course in the core curriculum)

Dr. Phyllis Conn

Mr. Michael Benjamin

# What is “Discover New York”?

- First-year seminar approach
- Required for all majors
- Over 90% in first year
- Interdisciplinary course about NYC
- Three credit hours
- Writing intensive
- Focus on immigration/migration

# Course Demographics

- 24 students; second-semester
- Honors section
- All five colleges represented;  
concentration of science majors
- 19 from NYC metropolitan area (unusual for SJU)
- About half speak two or more languages
- Most are not first-generation college (unusual for SJU)

# Majors

12 related to medicine

- 8 biology (pre-med); 3 toxicology (Pharmacy); 1 chemistry

5 in Liberal Arts College

- Math, Asian studies, psychology, environmental studies

4 in College of Professional Studies

- Criminal justice, journalism, sports management, communication arts

2 in accounting (Business School)

1 in education (Education School)

# Plans after graduation

- One-half (12/13 students) expect to attend graduate school, medical school, etc.
- One-third (7 students) expect to go directly into professional work
- A few don't know
- Little change from January to May in their majors and anticipated plans after graduation

# How Evidence is Used in the Class

Historical analysis of migration to NYC

Connect personal/family narrative of migration – creative non-fiction

Based on:

- Primary sources

- Instructional materials (lectures, handouts, videos, etc.)

- Limited research with secondary sources, monographs



# Using Evidence — Reading

- Close reading techniques
- Primary source reader (textbook)– notes on author, context, main points
- Other sources (websites, handouts, lectures, etc.) – worksheets and notes on main points, comparison with textbook
- How does this connect with migration?

# Using Evidence – Writing

Formal writing: Three major assignments on migration; creative non-fiction

Pre-revolutionary; industrial; post-war

Informal writing: reflections (Ellis Island); worksheets; index cards; writing in laptop or notebook

# Writing Fellow

Key part of course – embedded WF

Third semester together

Regular meetings, even during summer

Planned/discussed assignments, student writing

Middle ground perspective in class, 1-on-1

Required and optional appointments outside class

# Survey Results – January 2016

What has come easily to you as a writer? As a reader?

What have you struggled with as a writer? As a reader?

- 11 mentions – struggling with concentration as a reader
- 13 mentions – comprehension comes easily as a reader

# Survey Results – January 2016

Struggled with/come easily as a writer

8 mentions of struggling with **grammar, sentence structure, vocabulary**

Others: thesis statements, procrastination, creative writing, etc.

11 mentions of **“writing in general”** coming easily

“I can write a lot about a topic” “Writing freely” “I can keep going and seldom lose motivation”

# Survey Results – May 2016

“What writing projects/assignments/reflections that you did in this course did you like the most? Why?”

Academic Service Learning Reflection	8
Personal narrative in major assignments	4
Miscellaneous other specific writing projects (no pattern)	9
No response	3

# Survey Results – May 2016

Nearly all students who responded (16 out of 18) reported that the **formal assignments helped them with learning in the course** (agree/strongly agree)

Nearly all students who responded ( $\approx$ 18 out of 20) reported that the writing in the course helped them **think independently and critically**; increased their **understanding of the subject**; and increased their **connection to NYC** (agree/strongly agree)

# Interventions in students' use of evidence

- All students showed ability to use evidence in short, focused assignment after instruction; may not have understood what they were doing
- One-half showed some problems using evidence in formal assignment (first and second assignments)
- Continued in-class modeling; peer review
- Interventions by WF and instructor
- Some improvement for one-half of those with interventions



# Conclusions

- A place for personal narrative (creative non-fiction) in a content course
- Build in targeted interventions on specific skills
- Consider building on strong identity with major/disciplines in honors sections
- Consider changing the textbook; or changing how I work with it
- Importance of asking questions, surveys, etc. – brings up more questions (“tell me more about that”)

# **Legal Writing**

(A required course in the Legal Studies  
Major)

Prof. James A. Croft, JD

# What is “Legal Studies”?

- Law at the undergraduate level—a Major
- American Bar Association-Approved Paralegal Education Program
- De Facto Pre-Law Program
- Program Mission:
  - Teach the core college competencies of research writing and critical thinking through analysis of legal problems
  - Prepare graduates for entry-level work in law-related fields

# Evidence And Legal Writing

- Purpose of the Class: To teach students to effectively convey a legal analysis in writing
- Legal Analysis:
  - Identifying the relevant facts
  - Identifying the relevant law (cases and statutes)
  - Applying the relevant law to the facts
  - Coming to appropriate legal conclusions
- Students were required to draw from primary legal texts—statutes and judicial opinions

# What We Did—Semester View

- One large, three research issue, legal memorandum on a felony murder hypothetical
- Writing Assignments:
  - Students did drafts and rewrites of the three research issues and pulled the memorandum together based on those drafts
  - Students did small writing assignments at the beginning and end of the semester
  - Students briefed cases
  - Students did two reflections

# What We Did—My Philosophy

My organizing principle for the semester was to try to bring the students through the research, writing and editing processes that I would have gone through if I had to analyze and write about our problem.

# What We Did—On a Daily Basis

- Discuss the basic statutory analysis of our problem
- Discuss each of our sources—cases and statutes
- Take Notes on these sources
- Outline each of the research issues
- Begin the drafting process
- Peer review and edit student work
- Spend time in class drafting/editing
  - “guide on the side”
- Work on applicable Legal Citation formats

# Research Questions

- How effective is this course/teaching method at teaching evidence-based analysis—one of the core aspects of the legal profession?
- How did this course/teaching method affect students' professional identity—the level with which the students identify with the legal profession?



# Survey Demographic

- Two sections of Legal Writing
- 40 students enrolled
- 35 end of the semester survey respondents
- Mostly underclassmen
  - (68% freshman, 11% sophomores, 16% juniors, 5% seniors)
- 91% expressly mentioned the possibility of law school or working in the legal profession in the future

# Survey Results—Macro

100% Student Agreement that:

1. Course increased connection to the legal profession
2. Course increased ability to read and understand legal texts\*
3. Course increased ability to draw from legal texts to analyze legal problems
4. Course increased ability to write effectively\*\*

\* Strongest Agreement

\*\* Least Strong Agreement

# Survey Results—Unpacked

Response Options: Strongly Agree (“SA”); Agree (“A”); Somewhat Agree (“Some A”); Disagree; Strongly Disagree; N/A\*

1. SA= 57%, A= 26%, Some A= 17%
2. SA= 71%, A= 20%, Some A= 9%
3. SA= 66%, A= 26%, Some A= 9%
4. SA= 46%, A= 37%, Some A= 17%

\*For these questions, no student responded “Disagree,” “Strongly Disagree” or “N/A.”

# My Conclusions

- Students value working with the sources that professionals use in the field
- Working with these sources/using these sources in analysis/writing with these sources, increases:
  - Students' connection to the profession
  - Students' confidence that they can one day join the profession
  - Students' ability to effectively use these sources

# My Conclusions—Cont.

- Students valued the process of taking notes together
  - Useful from an inclusion point of view
  - Helped students understand the most relevant aspects of the sources and how they applied to our problem
- Course was more about effective use of evidence than about using evidence generally
  - Coming to an appropriate conclusion
  - Supporting that conclusion using appropriate sources
  - Appropriately citing/quoting such sources
  - Cutting extraneous materials

# Physical Chemistry and Experimental Physical Chemistry

(A required course in the Chemistry  
Major)

Prof. Joseph M. Serafin

# Class Composition

- ~15 students per year in both lecture and laboratory
- 3 years of study (pretty consistent)
- Varying levels of preparedness for the course
- Many of the students are terrified of the math and content
- Perceived as a very challenging course

# Science as Community

Question → Answer                      (Me)  
Answer → Society                        (We)

1. Analysis of critical literature
2. Science as society
3. Me to We emphasis
4. Focus on society for emphasis



# Evidence Application

0. Introduction
1. Theory (How)
2. Results/Calculations (What)
3. Discussion

**Did you answer your question?**

**Why should I believe you?**

**What is your evidence?**

4. Overall

**Was the question answered?**

# Evidence Usage Analysis

- Note that students were required to submit a draft of the first and last report (~12 reports)

Reports

Topics

1<sup>st</sup>

9<sup>th</sup>

2.5(1.4)

2.5(2.7)

# References Cited

**1.5(1.2)**

**3.1(1.7)**

**# Data Citations in Discussion**

**55%**

**67%\* Was a claim made in the report?**

**36%**

**58%\* Was the claim supported?**

\* ?

# Does the Student Attitude Matter?



# Do the Student Goals Matter?



# College Students Are Effective Studiers?

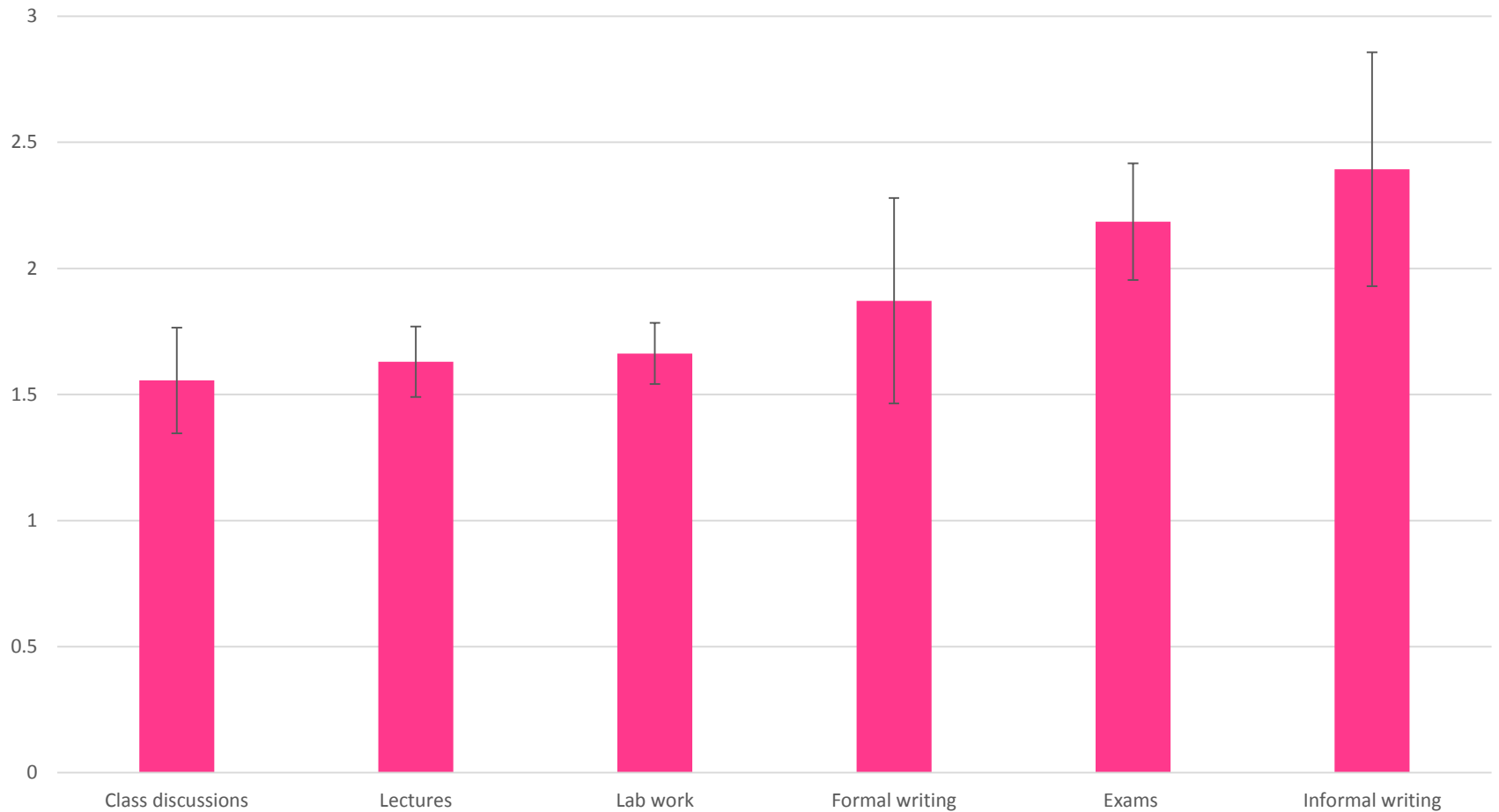


Journal: “As you engage new concepts in physical chemistry how do you think about them?”

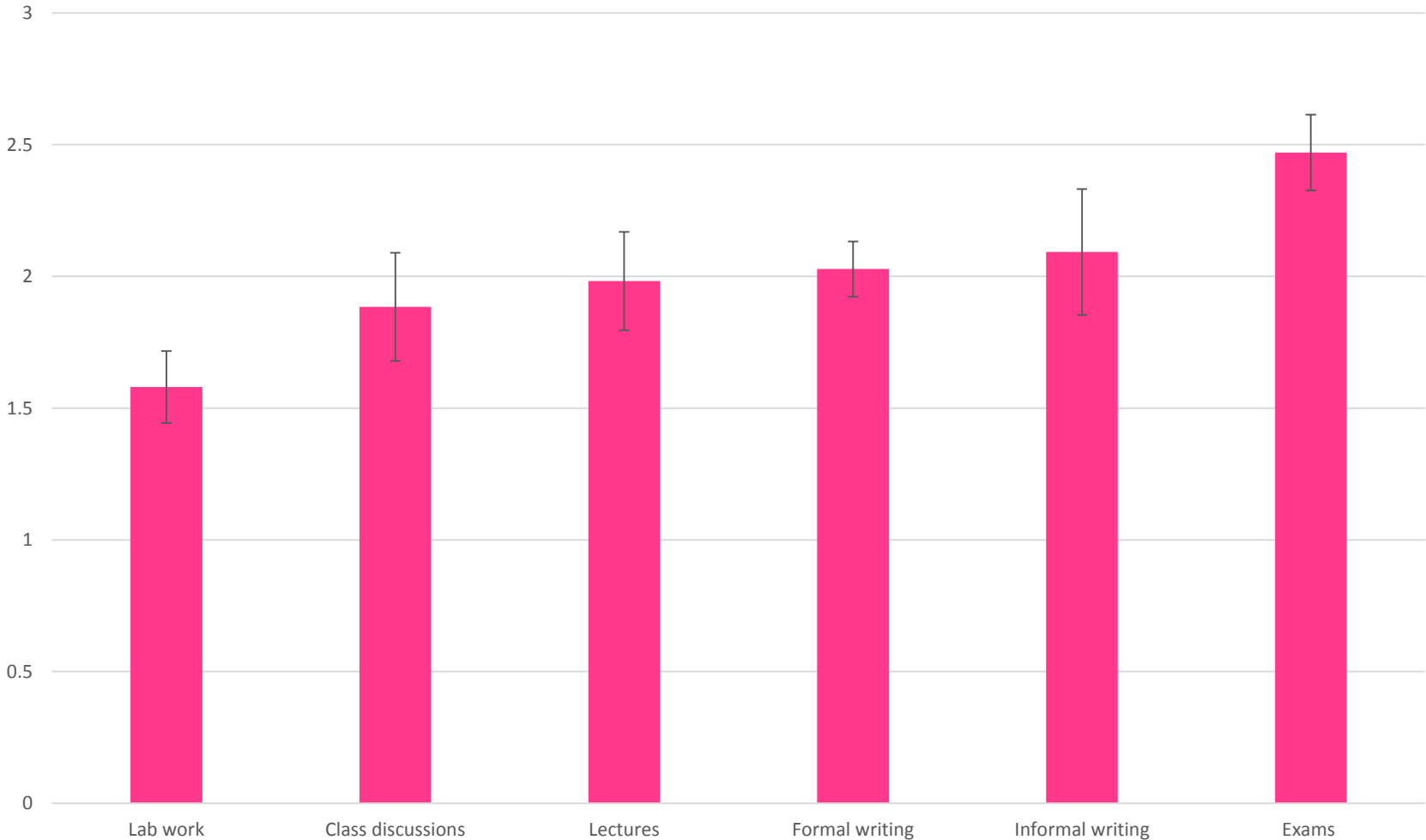
Key words from four student journals (year 1)

- Entropy, enthalpy, activity, chemical potential
- Remember, similar, explained
- Describes, given, write equations, makes sense
- Imagine, draw a picture, relate, concept, apply, equations, makes sense

# Content Learning Effectiveness



# Connection to Profession Effectiveness





# Favorite Activity

- We had a short paper looking at a piece of data associated with climate change
- We combined all of the data and had a class discussion looking at all of the data

How many people have use reflections  
or journals in courses?

# Consider-

- When are your students most challenged?
- What would you like to make them more mindful of?
- What can you do to help them reflect on that?
- What would you like to know about the student?
  
- Add a reflective activity, and
- **Add it to your syllabus!**
- I would love to know if you did it and found it valuable, let me know at [serafinj@stjohns.edu](mailto:serafinj@stjohns.edu)

# **Senior Seminar**

(A required capstone course in CSD)

Dr. Rebecca Wiseheart

# Communication Sciences & Disorders Major

Undergrad programs in CSD prepare students for graduate study/careers in

- 1) Speech-language pathology
- 2) Audiology
- 3) Speech, language, and hearing science

# What is Senior Seminar?

- Capstone course for the major
  - Science literacy as it pertains to advanced (graduate) study, professional competency, and lifelong learning
  - Introduction to research design, tests and measurements, statistical analysis
  - Culminating in a research product

# Class

3 hour block/1x week

10 seniors in their last semester

- 8 were bilingual
- 7 were first generation Americans
- 2 second generation Americans

# What Does Professional Identity Mean to These Students?

- Entry level into profession is a graduate degree
  - 9 had applied to grad school for CSD; 1 for MSW
- When did you declare your major?
  - 3 as Freshman\*; 7 as Sophomores
- Five year plan?
  - 8 working as SLP; 2 other
- Professional identity = SLP graduate students



# What part of grad school do you have the most anxiety about?

Curricular demands/difficulty (6)

Time management/workload (4)

Not being prepared for clinic

Tuition

Deciding on an area of specialty

Finding a job after school

*"I'm worried I won't be able to keep up."*

*"I'm not a strong science student so I'm worried about my ability to do well in science courses."*

# Course Objectives

- Describe the basic research methods and tools necessary for graduate study and professional growth in CSD.
- Develop scientific research and professional writing skills.
- Demonstrate knowledge of historical controversies and professional trends in CSD practice and research.
- Practice clinical intervention techniques and record keeping.
- Understand how scientific research is conducted, reported, and disseminated
- Understand the relationship between scientific research and evidence based practice

# What evidence means in CSD

Evidence Based Practice (EBP) is the cornerstone of clinical practice and is stressed in many UG courses in the major

- (1) clinical expertise/expert opinion
- (2) external scientific evidence
- (3) client/patient/caregiver values



# Part I. Critical Reading of Research

- Students completed an extensive assignment exploring EBP web pages on ASHA website (individually)
- Also completed an APA module and had mini lessons on using citations
- Through guided, group, and independent reading of primary sources, students:
  - evaluated science as presented in the popular media
  - evaluated scientific journal articles
  - wrote an annotated bibliography (small groups)

# Part II. Conducting Clinical Research

- Students completed a 6-week long academic service learning project
  - Seminar students served as English conversation partners to international students who agreed to serve as mock “clients”
  - Seminar students took data & charted progress

As a class, we compiled this data and used it as the basis for writing a research paper

# Part III: Writing a Research Paper

- We used Microsoftonline.com to write one document together
- Introduction: Students worked in small groups to write sections of the introduction using information from their annotated bibliographies
- Methods: Students were given a model paper which we imitated to create methods section
- Results: We compiled all the data on an excel sheet, calculated effect sizes, and create charts
- Discussion: We wrote this together imitating the model paper
- References: Students compiled this from their annotated bibliographies

# Writing Products

- Annotated bibliography
- Research paper—Introduction, methods, results, discussion & references page
- APA format practice
- Script for research day presentation
- Clinical SOAP notes
- Transcription from AS-L sessions

# Formal vs. Informal Writing

How I defined Formal Writing: Typed and written with time for *editing*

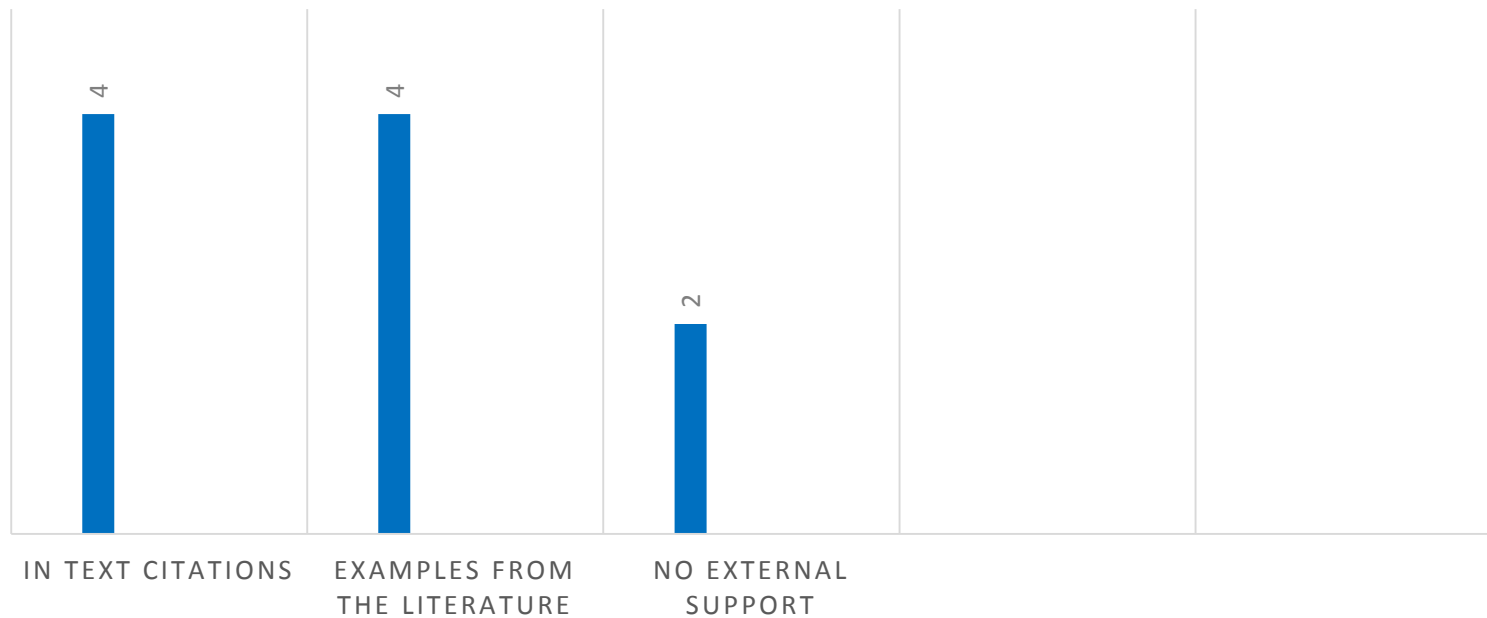
- Research Paper (APA style writing)

How I defined Informal Writing: Anything that was written on the fly with *little to no editing*

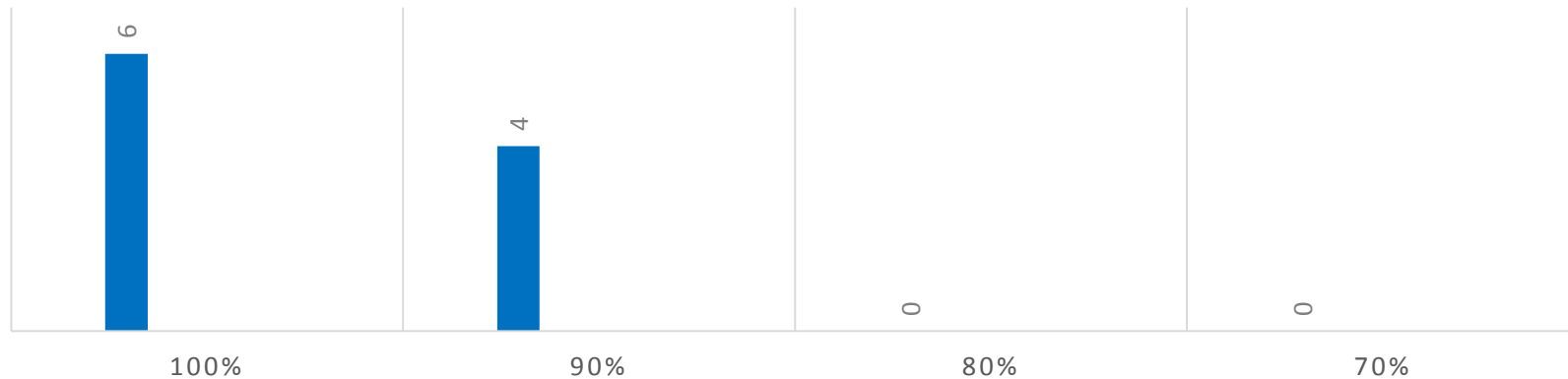
- SOAP notes (clinical writing)



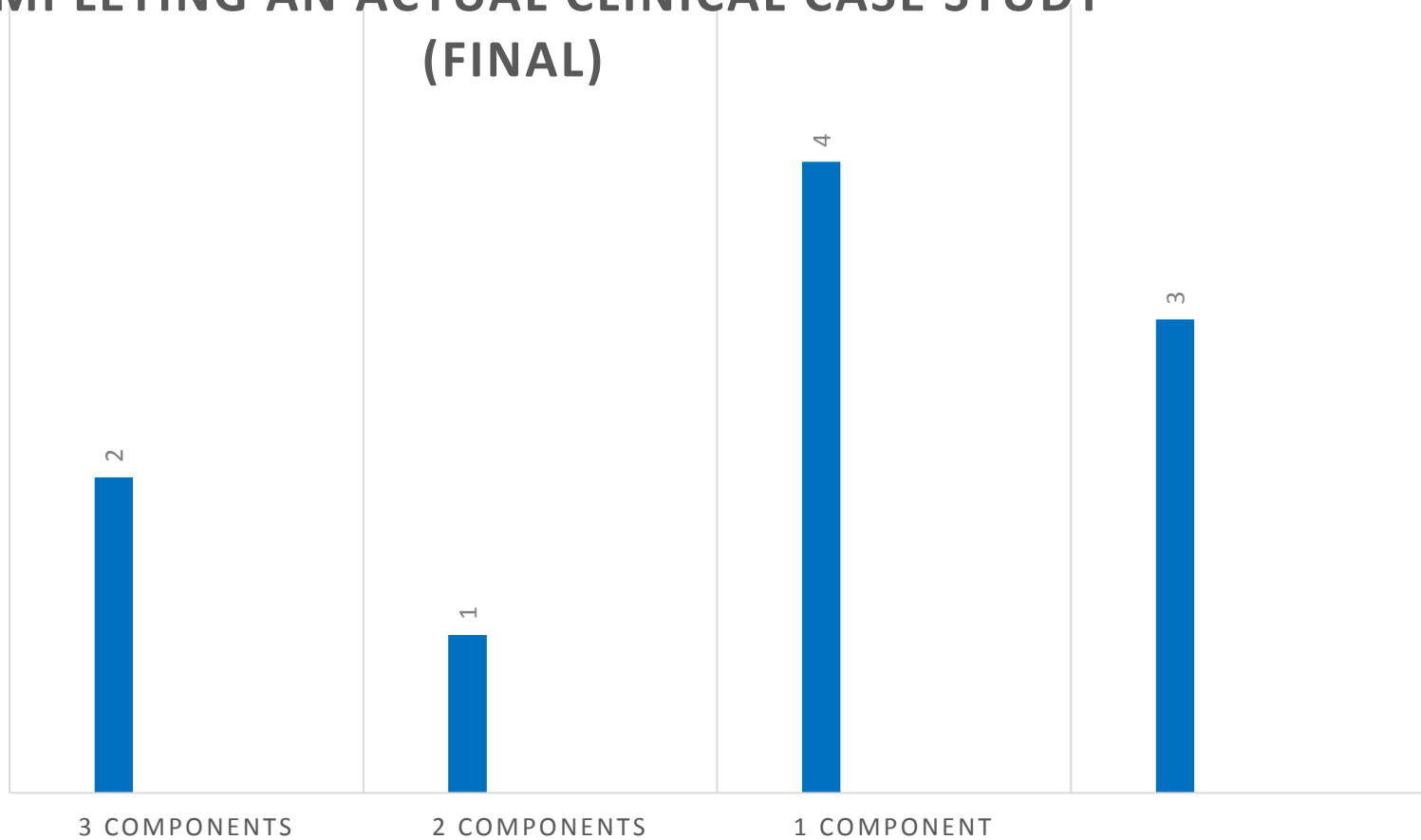
## NUMBER OF STUDENTS WHO USED EVIDENCE IN THEIR WRITING TO EVALUATE A RESEARCH ARTICLE (MIDERM ASSESSMENT)



**NUMBER OF STUDENTS WHO DEMONSTRATED  
MASTERY OF APA STYLE FOR  
REFERENCES AND IN-TEXT CITATIONS AFTER  
WRITING GROUP RESEARCH PAPER  
(FINAL)**



# NUMBER OF STUDENTS WHO APPLIED EBP TO A HYPOTHETICAL CLINICAL CASE STUDY AFTER COMPLETING AN ACTUAL CLINICAL CASE STUDY (FINAL)



# My Summary

- Students can master APA format for citations with relatively little instruction
- Students can talk about levels of evidence used in behavioral science (e.g., expert opinion vs. meta-analysis) and in clinical practice (EBP)
- Students can use evidence from scientific literature to support a critical evaluation of a treatment study (research problem)
- Students cannot yet apply evidence to hypothetical case studies (clinical problem)

# STUDENT RESPONSES TO QUESTIONNAIRE

Item 5=strongly agree 1=strongly disagree	“These activities helped me develop my <b>professional identity</b> ”		“These activities helped me with <b>learning</b> in the course”	
Class discussion/Lectures, generally	4.50		4.25	
Meeting with AS-L Clients	4.12		3.75	
Writing SOAPs	<b>4.62</b>		<b>4.25</b>	
Reading Research Articles	4.38		4.00	
Writing Annotated Bibliography	4.38		3.87	
Writing the Research Paper	4.50		4.12	

Informal clinical writing > formal academic writing > meeting with “clients”

Informal clinical writing = class discussions > Formal academic writing

# Other Student Responses to Learning Activities

- Regarding learning activities that increased knowledge about using evidence
  - Students ranked reading (4.7) higher than writing (4.4)

# What did you like most about this class?

- I was able to become comfortable with reading research papers
- The writing assignments, both group and individual.
- The class writing assignment was a great way to gain a deep understanding of how research is performed and how articles are written.
- Using our own AS-L experiences as the topic of the paper helped keep everyone engaged.
- I learned a lot about the research process along with how to write a strong research paper that I can take with me to grad school

# **CROSS-DISCIPLINARY CONCLUSIONS**



# What we learned from our classes

1. Does instruction focused on “evidence” transfer to students using evidence in their writing?

DNY-Yes, some    LAW- Yes    CHEM- Mostly yes    CSD-No

2. Does writing about/with evidence contribute to the development of students’ professional identities?

DNY-N/A    LAW- Yes    CHEM- Yes    CSD-Absolutely

# What we learned from this project

- Students value working with primary sources that professionals use in the field and being engaged in authentic disciplinary activity
- Students are interested in learning and are surprisingly quick to master the form of discipline specific writing with practice
- Guide-on-the-side/modeling/collaboration for students is perceived as helpful
  - All of these are confidence building

# What we learned from each other

- Teaching in the professions is partly a matter of curating
  - Discipline specific READING became a topic of many discussions
  - Students are terrified
- The value of working as a class on one assignment throughout the semester or over several revisions—writing for mastery
- How seldom we ask the question of ourselves or of our students AND measure:  
*Does teaching about \_\_\_\_ improve learning about \_\_\_\_?*
- Still wondering about whether professional identity contributes to learning more than identifying as a college student—maybe “evidence” is the more appropriate lens

# References

- Anderson, P., Anson, C. M., Gonyea, R. M., & Paine, C. (2015). The contributions of writing to learning and development: Results from a large-scale multi-institutional study. *Research in the Teaching of English, 50*(2), 199.
- Berrett, D. (2016). If skills are the new canon, are colleges teaching them? *The Chronicle for Higher Education*
- Eun, B. (2008). Making connections: Grounding professional development in the developmental theories of Vygotsky. *The teacher educator, 43*(2), 134-155.
- Folkins, J. W. (2016). Are we asking the right questions about pedagogy in communication sciences and disorders?. *Contemporary Issues in Communication Science and Disorders, 43*, 77.
- Grillo, E. U., Koenig, M. A., Gunter, C. D., & Kim, S. (2015). Teaching CSD graduate students to think critically, apply evidence, and write professionally. *Communication Disorders Quarterly, 36*(4), 241-251.

# References

- Klein, P. D., & Boscolo, P. (2016). Trends in research on writing as a learning activity. *Journal of Writing Research, 7*(3).
- Lang, J. (201). Six small changes in teaching: Making connections. *Chronicle of Higher Education*
- Reynolds, J. A., Thaiss, C., Katkin, W., & Thompson, R. J. (2012). Writing-to-learn in undergraduate science education: A community-based, conceptually driven approach. *CBE-Life Sciences Education, 11*(1), 17-25.