



“How Do You Know That Works?”

A Mixed Methods Approach to Assessing Student Writing in Writing Intensive Courses

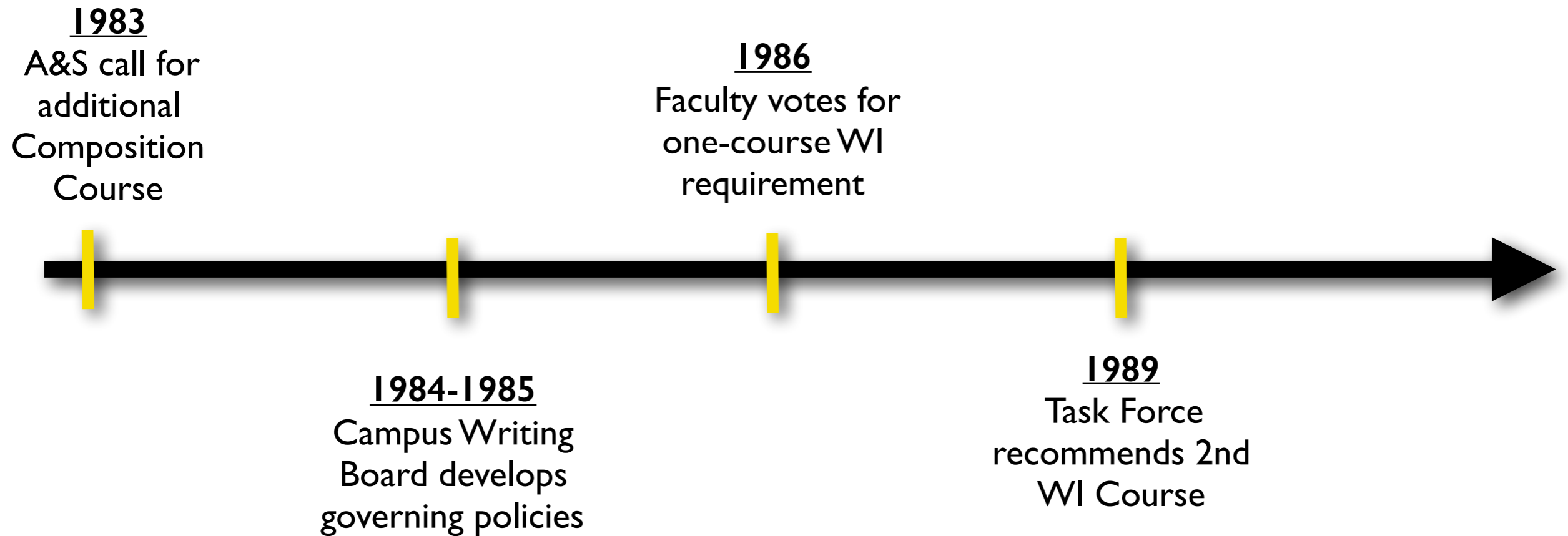
Amy Lannin, Director
Jonathan Cisco, Asst. Director



Our Mission

Our mission is to support faculty as *the* primary agents of Writing Across the Curriculum (WAC) theories and practices in educating students through principles of “writing-to-learn” and “learning-to-write.” We believe that teaching by these principles will enhance students’ critical thinking abilities and better engage them in complex problem solving while they learn to communicate with clear, effective language in discipline-specific ways.

Origins



Over 5,000 Courses Since '99

MU's Writing Requirement

English Department

English 1000, First Year Composition

CWP and MU Departments

3 WI Credits in any discipline or level

+ 3 Upper-Division WI Credits in Major

~~3~~
6 WI Credits (or more)

Writing Intensive Guidelines

- 20:1 Student-to-Faculty ratio
- Multiple Assignments and Revisions
- Writing for entire course at least 6600 words (20 pages)
- Writing/revising throughout semester
- Writing major portion of grade

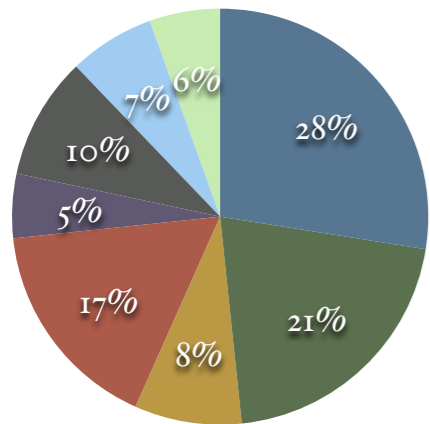


“Do writing-intensive courses actually work? How do we know that they facilitate student learning?”



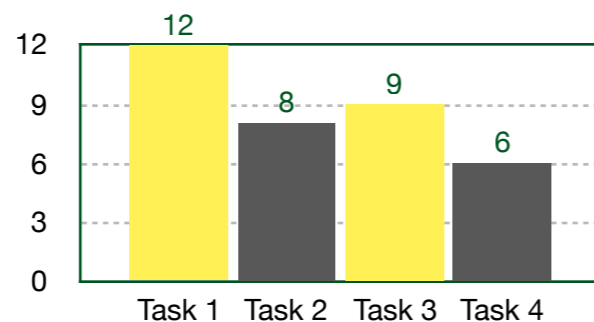
Mixed Methods Approach

QUANTITATIVE



FREQUENCIES

REGRESSIONS

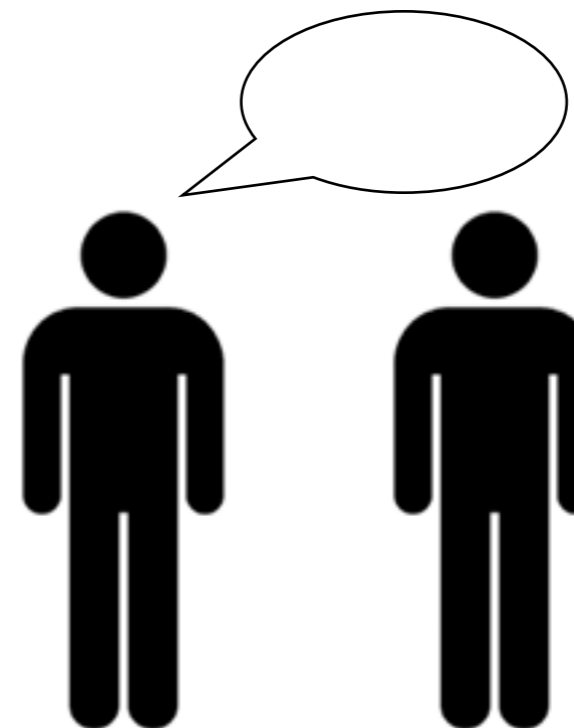


Qualitative

Observations

Interviews

Themes



Overarching Research Questions

“ *How do students’ WI experiences align with WI Guidelines?*

How is writing in WI courses helping students think critically about course content?

How are WI courses supporting students’ writing in the disciplines?

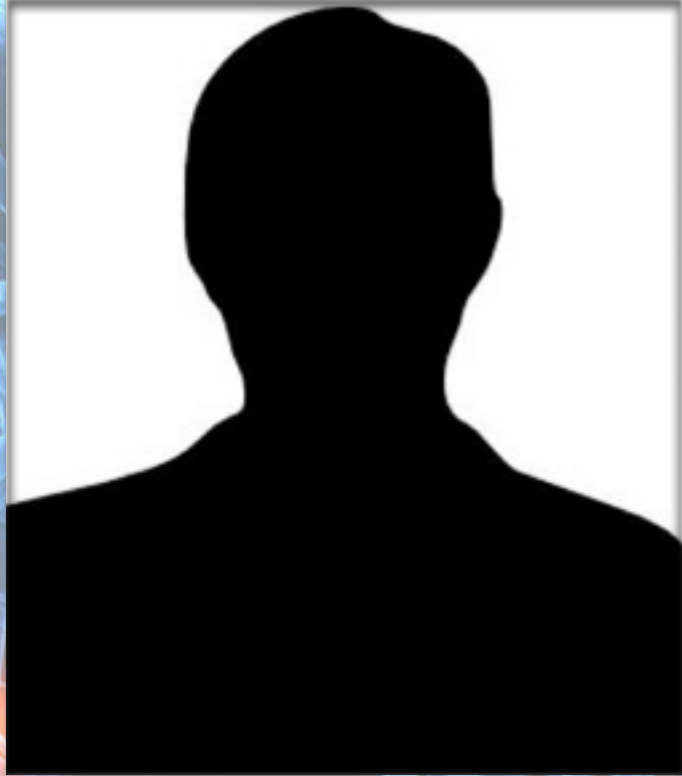
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Program Assessment

- Self-sponsored vs. university-mandated
- Student-centered; Faculty-driven; Meaningful (Carter, 2003)
- Macro and Micro (Patton, 2011) View of the Program
- Look at processes and experiences, not just an end-product (Gallagher, 2012)

- **Situative/Contextual - taking in the situation/contexts (White, Elliot, & Peckham, 2015; Borko, 2004)**
- **A messy process (White, 2007; Fulwiler, 1988)**
- **Systematic and Useful Program
Assessment as part of our regular work
(Walvoord, 2010)**

Biology



Professor Smith

Genetics & Society

Approximately 55 Students

Typically pre-med students

4000 Level (Junior-Senior)

“...Genetics and Society examines new discoveries in human molecular genetics/medical research and their impact on society.”

Agricultural Economics



Professor Jones

New Products Marketing

Approximately 168 Students

Economics and Business
Students

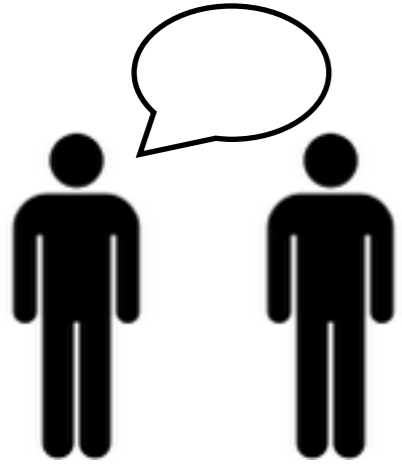
3000 Level (Junior-Senior)

“... a unique learning opportunity for students from various departments to develop practical marketing skills.”



Data

Interviews



Student Papers



Surveys



Syllabi and Assignments



Table 1

Results of paired samples t-test on mean difference of rough draft and final draft scores using analytic rubric

				95% CI for Mean		
	M	SD	n	Difference		
					t	df
Microtheme 5	3.17	5.19	14	0.17, 6.17	2.29*	13
Microtheme 6	2.34	6.91	20	-0.86, 5.58	1.51	19
Microtheme 7	5.04	3.60	9	2.27, 7.81	4.19**	8

* $p < .01$ ** $p < .001$

Table 2

Results of paired samples t-test on mean difference of rough draft and final draft scores using holistic rubric

				95% CI for Mean		
	M	SD	n	Difference		
					t	df
Microtheme 5	2.93	8.33	14	-1.88, 7.74	1.32	13
Microtheme 6	3.20	6.79	20	0.23, 6.38	2.11*	19
Microtheme 7	5.44	3.50	9	2.75, 8.14	4.66**	8

* $p < .01$ ** $p < .001$

Table 4

Results of paired samples t-test on mean difference of rough draft and final draft scores using analytic rubric

				95% CI for Mean		
	Mean	Std. Dev	n	Difference		
					t	df
Competitive Analysis	4.12	6.19	13	0.38, 7.86	2.40*	12
Promotional Plan	2.54	3.17	14	0.71, 4.38	3.00**	13

* $p < .05$, ** $p < .01$

Table 5

Results of paired samples t-test on mean difference of rough draft and final draft scores using holistic rubric

				95% CI for Mean		
	Mean	Std. Dev	n	Difference		
					t	df
Competitive Analysis	3.00	8.90	13	2.38, 8.38	1.22	12
Promotional Plan	3.62	3.57	13	1.46, 5.77	3.65**	12

* $p < .05$, ** $p < .001$

Qualitative Findings

Writing Impacts Learning

Students/Faculty believe WI courses promote critical thinking toward conceptual learning

WI Faculty exhibit reflective stance in teaching which fosters student learning

WI courses promote faculty-to-student and student-to-student interaction, which enhances the learning environment

WI Courses Help Students Reach the Learning Outcomes of the Campus Writing Program

Authentic writing assignments support students' writing in the disciplines

WI courses are effective and worth studying in more depth

Writing Impacts Learning

Critical Thinking

“As far as retention, I remember things I wrote about better because I had to come up with ideas. I had to form the thoughts that I was going to give in the paper. So, the act of doing that helps you to think and remember things better.” (Student Interview)

Writing Impacts Learning

Reflecting on Own Learning

“So minority students find themselves excluded from these groups, or just socially not part of the network, and so they try to work things on their own. And they may work very, very, very hard at it, but they don't even know that other students are all talking to each other.

I was in a similar position being a female at a mostly male engineer school. I didn't realize that all the other students were getting together to work on problems until I was a senior. And I thought it was cheating to talk to other students about the problems.”
(Instructor Interview)

WI Courses Help Reach Learning Outcomes

Authentic Writing Experiences

Writing intensive courses kind of change you. This is how you're supposed to think in [a] business environment, this is how you formulate your thoughts to convey your idea to maybe in a call center, or a colleague. So, [WI courses] kind of keep going back to the conceptual thinking but kind of really broadens your perspective on how you're expected to think. If I was trying to learn the way someone is thinking, if I am the boss and one of my employees is writing to me-- It helps me to know that they understand better through writing instead of just kind of yes/no or black and white type of thinking.

(Student interview)

Conclusions

Large Scale Writing-Intensive Programs Work

Empirical evidence indicating support for writing-intensive courses from participating students and faculty.

Students Aware of the Benefits of Writing

Students supported WI instruction while enrolled in course. Support may increase after a period of reflection.

Students Strongly Prefer/Appreciate Authentic Disciplinary Assignments

Emails to CEOs; Pitching Products; Real-World Debates



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