#### Writing Across the Curriculum

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# WAC Week Nov. 6-10

# Welcome to WAC Week

**Upcoming Workshops** 

- Engaging Students through Multimodal Writing Assignments Tuesday, November 7<sup>th</sup> | 2:00 to 3:00pm
- Linguistic Justice in Writing Across the Curriculum Wednesday, November 8<sup>th</sup> | 9:00 to 10:00am
- Responding to Student Writing Effectively and Efficiently Wednesday, November 8<sup>th</sup> | 3:00 to 4:00pm
- Using Writing to Support Learning, Critical Thinking, and Inclusion at an Emerging HSI Thursday, November 9<sup>th</sup> | 2:00 to 3:00pm | Zoom and In Person
- Using Generative AI to Enhance Student Engagement with Course Content Friday, November 10<sup>th</sup> | 10:00 to 11:00pm

Learn more at writingcenter.colostate.edu/wac.



# Welcome to WAC Week

**Small Grant Applications** 



Goal: Develop one or more writing activities or assignments

Support:

- Consultation with an experienced writing instructor
- Materials development
- Outcomes assessment appropriate for demonstration of teaching effectiveness

Learn more at writingcenter.colostate.edu/wac/grants.

Using Writing to Foster Learning, Engagement, and Critical Thinking

Mike Palmquist Colorado State University



# A Quick Overview

- An overview of Writing Across the Curriculum
- Exploring connections between critical thinking and WAC
- Exploring the design options for writing assignments that achieve course goals



# **Starting Points**

- The Writing Across the Curriculum Movement in the United States (now in its sixth decade).
- Characterized by David R. Russell as among the most successful higher education reform movements in the United States
- Identified among the first high-impact practices, under the phrase "writing-intensive courses," that had been shown to contribute to student learning and success (Kuh, 2008)

# Traditional Reasons to Use WAC







To help students learn

To improve communication skills

To prepare students for careers and civic life

# Additional Reasons to Use WAC









To engage students more deeply in course concepts and processes To help students gain control of disciplinary analytical frameworks To prepare students for progressively greater challenges as they move through their academic careers (i.e., enhance student success) To help students develop critical thinking skills

#### Approaches to WAC

- WAC scholars have focused on two general approaches:
  - Writing to Learn
  - Writing in the Disciplines
- In the mid-2000s, when we began to explore the connections between WAC and critical thinking at TILT, this seemed insufficient.
- I proposed a third way: Writing to Engage (see <u>https://doi.org/10.37514/WAC-J.2020.31.1.01</u>).



## Three Approaches to WAC



Writing to Learn

Writing to Engage

Writing in the Disciplines

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# Writing to Learn

**Definition**: Using writing to help students remember, understand, and reflect on course concepts, conceptual frameworks, skills, and processes.

Useful for helping students remember and understand course content (as opposed to cramming for exams)

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# Writing to Learn

#### **Best Characterized as Low-Stakes Writing:**

- The focus is on content; recognizing that students often struggle with new ideas, little or no attention is given to form.
- Limited feedback, if any, is provided by the instructor.

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# Writing to Learn

#### Some Typical Activities:

- In-Class Responses to Prompts
- Reflections
- Summary/Response
- Forum Discussions
- Definitions and Descriptions

**Definition:** Writing in the Disciplines (also referred to as writing to communicate). Using writing to help students learn how to contribute to discourse within a discipline or profession.

Useful for preparing students to

participate fully in their careers and in civic life. writing-in-the-disciplines activities often familiarize students with writing and design conventions typical of a given discipline or profession.

Sometimes viewed in opposition to Writing to Learn (WAC and WID, for example).

# Best characterized as "high-stakes" writing

- A greater investment of instructor time is required for designing and responding to student writing.
- There is greater potential for student academic misconduct, especially among students who lack confidence in producing original work.

#### Typical activities include:

- Articles and essays
- Presentations
- Conference proposals
- Longer reports
- Poster sessions



# My Felt Difficulty

- Writing to Learn and Writing in the Disciplines seemed distant from one another.
- In some programs, they were characterized as entirely different things, with one seen as "WAC" and the other as something other than WAC.
- In my work with faculty while I was at TILT, I saw a need to focus on higher-level critical thinking (but not always at the highest level).

# My Response

I began to explore connections between critical thinking and WAC.

# Critical Thinking Frameworks

#### Bloom's Taxonomy (Modified)

• Benjamin Bloom, modified by Lorin Anderson et al.

#### **Developmental Frameworks**

- Piaget (Cognitive)
- Vygotsky (Activity Theory, Zone of Proximal Development)
- King and Kitchener (Reflective Judgment Model)
- Perry Scheme (Epistemological Growth)

#### **Higher Order Thinking Skills**

• Various, and often derivative of Bloom

### Bloom's Taxonomy (Revised)



### Bloom's Taxonomy (Modified Again)



#### Mapping WAC to Bloom



# What's Missing?

- Using writing activities and assignments in ways that encourage students to go beyond remembering and understanding—without requiring them to start writing like members of their chosen disciplines or professions.
- Essentially, a middle ground between writing to learn and writing in the disciplines.

**Definition:** Using writing to help students assess and work with course concepts, conceptual frameworks, skills, and processes.

Useful for strengthening student understanding and application of key disciplinary concepts and processes.



# Writing to engage activities and assignments

- Are less likely to resemble formal, discipline-based writing, but they can center students' attention on issues that are central to the discipline.
- Could work well in a second-year or third-year course. They might also be used in a course offered toward the end of a student's first year.
- Can play a role in staged writing assignments. For example, they might lay a foundation for work on a senior design project in engineering.



Can be characterized as either "lowstakes" or "high-stakes" writing, or it might fall somewhere between the two.



#### Writing to engage assignments can:

- Build on writing-to-learn activities and assignments
- Support a higher level of engagement than writing-to-learn activities and assignments
- Focus on reflecting, applying, and analyzing and might include some attention to evaluating
- I tend to think of it as work that supports the synthesis of existing information and ideas and, equally important, the creation of new knowledge and insights.



#### Typical activities include:

- Reflections, critiques, and comparisons
- Application of frameworks to texts, media, and cases
- Topic proposals, progress reports, and other brief reports
- Evaluations of alternative approaches and methods



#### Remapping WAC to Critical Thinking



**Remembering (in class):** Jot down the three most important ideas from today's reading . Be prepared to share them during discussion.

**Remembering (before class):** Identify the most important information in the reading assignment. In two or three sentences, explain why each one is important. Bring your assignment to class and be prepared to share your conclusions with your classmates.

**Understanding (in class):** What surprised or confused you about today's reading? In two or three sentences, explain why you made your choice. In a group of two or three classmates, share your explanation.

**Understanding (before class):** In four or five sentences, summarize today's reading. Then, in four or five sentences, explain why you focused on the information you included in your summary.

**Reflecting:** In four or five sentences, identify the most important information and ideas in today's reading. Then write a brief response to one of those ideas. Indicate what you found most useful, surprising, confusing, or disturbing about the idea.

**Reflecting.** Reflect on efforts to address climate change. Do you believe that people individually and as a group—will accept the inconveniences and sacrifices associated with the shift to new technologies? Why or why not?

**Reflecting.** Reflect on efforts to address climate change. Do you believe that people individually and as a group—will accept the inconveniences and sacrifices associated with the shift to new technologies? Why or why not?

**Applying.** Respond to [a recent editorial or news report] by applying one of the theories of [pick an area] we've been exploring in class. Explain why you did not pick one of the other theoretical frameworks we've been studying.

**Analyzing.** We've been examining the impact of recent legislation regarding legalization of marijuana for recreational use in several states in the US. Analyze the factors that have contributed to the passage of legislation and statewide referenda legalizing recreational use. What does your analysis indicate are the most common rationales for legalization? Which of these rationales do you find weakest? Why?

Applying and Analyzing. We've been studying group formation through the lenses of propinquity theory and exchange theory. Read Tarricone and Lucas' 2002 article, "Successful teamwork: A case study," and then use one of these theories to explain why the successful group was able to complete its project. Explain why you did not choose the other theory.

**Evaluating.** We've been exploring two promising battery technologies. If you had to choose one but not both technologies, which criteria would you use to inform your evaluation? Which technology comes out ahead when you apply your criteria? Which criteria did you consider but ultimately decide not to include? Why did you exclude those criteria?

**Evaluating.** You've been collecting information for a senior design project. Write a brief article that discusses the current state of knowledge relevant to your project. In your introduction, define the problem and explain why it needs to be addressed. Then identify and briefly discuss the key approaches that might be used to address the problem. Then identify the most promising approach and explain why it is superior to other approaches. Cite your sources within the text and in a references list.



# A Foundation for Using Writing in a Course

- 1. Understand the range of writing to learn, writing to engage, and writing in the disciplines activities that can support your course goals.
- 2. Choose writing activities or assignments that support the critical thinking needs of the course and discipline/profession.
- 3. Design writing activities and assignments that are compatible with the time you can devote to responding to students.



# Reaction Comments Discussion

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Visit WAC@CSU at https://writingcenter.colostate.edu/WAC

### References

- Anderson, L. W., & Krathwohl, D. R. (Eds.). (2001). A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives. Longman.
- Bloom, B. S., Engelhart, M. D., Furst, E. J., Hill, W. H., & Krathwohl, D. R. (1956). Taxonomy of educational objectives, handbook I: The cognitive domain. David McKay.
- Cavdar, Gamze, & Doe, Sue. (2012). Learning through writing: Teaching critical thinking skills in writing assignments. PS: Political Science and Politics, 45(2), 1-9.
- Doe, Sue R., Gingerich, Karla J., & Richards, Tracy L. (2013). An evaluation of grading and instructional feedback skills of graduate teaching assistants in introductory psychology. *Teaching of Psychology*, 40(4), 274-280.
- Doe, Sue R., Pilgrim, Mary E., & Gehrtz, Jessica. (2016). Stories and explanations in the introductory calculus classroom: A study of WTL as a teaching and learning intervention. *The WAC Journal*, *27*(1), 94-118. <u>https://doi.org/10.37514/WAC-J.2016.27.1.06</u>
- Gingerich, Karla J., Bugg, Julie M., Doe, Sue R., Rowland, Christopher A., Richards, Tracy L., Tompkins, Sara A., & McDaniel, Mark A. (2014). Active processing via write-to-learn assignments: Learning and retention benefits in introductory psychology. *Teaching of Psychology*, 41(4), 303–308. <u>https://doi.org/10.1177/0098628314549701</u>
- King, P. M. & Kitchener, K. S. (1994). Developing reflective judgment: Understanding and promoting intellectual growth and critical thinking in adolescents and adults. Jossey-Bass.
- King, P.M., & Kitchener, K.S. (2004). Reflective judgment: Theory and research on the development of epistemic assumptions through adulthood. *Educational Psychologist*, 39(1), 5–18. https://doi.org/10.1207/s15326985ep3901\_2
- Palmquist, Mike. (2020). A Middle Way for WAC: Writing to Engage. The WAC Journal, 31, 7-22. <u>https://doi.org/10.37514/WAC-J.2020.31.1.01</u>
- Perry, W. G. (1970). Forms of intellectual and ethical development in the college years: A scheme. Holt, Rinehart & Winston.
- Perry, W. G. (1981). Cognitive and Ethical Growth: The Making of Meaning. Jossey-Bass.
- Piaget, J. (1936). Origins of intelligence in the child. Routledge; Kegan Paul.
- Piaget, J. (1970). Science of education and the psychology of the child. D. Coltman (Trans.). Orion.
- Vygotsky, L. S. (1978). Mind and society: The development of higher mental processes. Harvard University Press.
- Vygotsky, L. S. (1987). Thinking and speech. In R.W. Rieber & A.S. Carton (Eds.), The collected works of L.S. Vygotsky, Volume 1: Problems of general psychology (pp. 39–285). Plenum Press. (Original work published 1934)