



A TRANSDISCIPLINARY APPROACH TO WRITING USING AI AND MULTIMODAL COMPOSITION

1. Exploring the Writing Tools of Literacy: Writing literacy establishments and adaptations, preservation, remediation, inventions, methods.
2. Historicizing technologies from the past and how they're used today.
3. A lesson on creating AI assignments.

WHAT IS GENERATIVE AI? AND WHY IS IT IMPORTANT

- **Defining AI:** A set of digital literacy tools
- **In Depth:** AI is an umbrella term for digital literacy tools used to generate, brainstorm, create, design, and transform content from interpreting visuals, converting handwritten prompts, and summarizing documents. GenAI is an algorithmically programmed syntax builder programmed to generate specific content based on input/output with both affordances and constraints.

We will learn about:

- The importance of communal terminology
- The importance of an interdisciplinary approach to civil discourse and GenAI tools

An Interdisciplinary and Transdisciplinary Approach to AI

THE IMPORTANCE OF TRACING WRITING TOOLS THROUGH HISTORY AND SITUATING THEM IN THEIR PRIME TIME
HISTORICAL COMPREHENSIVE TIMELINE OF LITERARY ARTIFACTS
WE LEARN THAT LITERARY TOOLS DIRECTLY RELATE TO CULTURAL SOCIAL, ECONOMIC, POLITICAL, EDUCATIONAL IMPACT ON LITERACY

Introduction-types of technology- Their uses then and now-where are we at and where are we going



Dennis Barron wrote From Pencils to Pixels: Setting the Stages of Literacy Technology



Kathleen Yancey composition in new key and how its still relevant today

READING PUBLIC

WRITING PUBLIC

NEW MOMENTS COME AND GO (HISTORICAL PATTERNS)

ENGLISH DEPARTMENTS → COMMUNICATIONS

DEPARTMENTS

You can read [Made Not Only in Words: Composition in a New Key her article here](#). 2004

FROM TYPEWRITERS TO WORD PROCESSORS BY: KIMBERLEE DOBEK

Writing Technologies Then and Now how Dennis Barron, Kenneth Burke, Douglas Eyman, and Paul Cook paved the way forward with [Literacy Tools in Composition: Typewriters to Computers, AI and Beyond](#)

Abstract: All writing technologies are tools of literacy—historically, these cyclical patterns of technology stem from innovation, wading through a laborious cycle of cultural resistance that eventually leads to literacy advancement and societal assimilation. Examining tools of literacy from the typewriter to computers, we can examine them as a socially embedded artifact of the 19th century. This article explores the process of new technologies and how they transition in time and eventually become invisible or go through remediation and become normalized everyday practices. Examining theories from Plato, Paulo Freire, Dennis Barron, Kathleen Yancey, Paul Cook, Gunther Kress, and Douglas Eyman through investigating the role of the typewriter as the predecessor to the computer and digital composition we will explore the role of Generative Artificial Intelligence (GenAI) through the lens of technologies situated in their time. The tremors and ripple effect, confronting our fears through the lens of the past, and how to combat their tumultuous effects in academia while paving a way forward confronting a paradigm shift grounded in literacy practices addressing the need for digital rhetoric, multimodality, fact-checking, and innovative pedagogy.

Stages of Literacy Tools: A Timeline

Let's take AI down from its threatening pedestal and trace the origin of writing tools throughout history

- Cuneiform, clay tablets & the first stylus
- The Quill → The Pencil → Pens
- Telephones → The Printing Press
- The Typewriter (1808) → Printers → (program-controlled) (RAM, and information retrieval) Computers (1937) (Engineers)
- Smartphones → Tablets & iPads
- Generative Artificial Intelligence → The future of writing literacy, technology, & GenAI → The Future

What we learn is that each literacy tool has its own timeline and evolution creating a ripple effect altering the ecological landscape within our society.

UNDERSTANDING NEW TECHNOLOGIES THROUGH THE LENS OF REMEDIATION

What is remediation? Remediation is a theory and process of understanding “new media” through a refashioning of traditional forms such as TV, paintings, photography, the typewriter in a linear fashion, paying homage to their literacy advances and refashioning old media forms through the process of reimagining technologies (Bolter).

What parts of technologies have been remediated in today's society that are often overlooked or invisible?

Make a list:

- QWERTY Keyboard
- Camera lenses

- Traditionally speaking, we take the good and leave the bad and I would encourage you to do the same with GenAI tools.

COMPARING LITERACIES

Typewriters

1808 – Present Day

- Constraints: time consuming, editing
- Affordance: repairable, analog (doesn't rely on technology and being plugged in)

Computers

1834-Present Day

- Affordances: flexibility, efficiency
- Constraint: uses electricity

Information Literacy → Digital Literacy



AI AND FIRST AMENDMENT RIGHTS: BIG CORPORATIONS

Hallucinations: False speech and liability

Using AI is a choice

Authorship: Using AI to generate written content and then using content as your own transfers authorship and is plagiarism

AI is fundamentally an LLM that rapidly builds syntax churning out lexically cohesive output

The Future of AI is a call for government regulation not to impede human rights

BUILDING AN AI TOOLKIT FOR TEACHING

- Building a Prompt: Input: CORE Framework
- AI Output: Fact-Checking, cross-referencing between AI platforms
- Re-Prompting: Using CORE Framework
- Checking for AI Prompt References
- Using the three dots to “double check response” to verify information accuracy: Green/ Orange
- CORE Framework: Different “Role” from friend, to colleague to business partner
- Keeping a list of changes or “hallucinations” using as teaching material
- AI can pull information from prior searches: use a fresh window!
- Remember AI is always the overconfident, supportive even when it shouldn't be, place your prompt on a pedestal kind of tool, double check because you are liable for what you produce using AI.



Upload a few articles on AI and how it went wrong



Exploring AI through inquiry: AI a Tool for Literacy

**HISTORICALLY LITERACY HAS
BEEN A LITERACY PRACTICE**

ORAL → PRINT → DIGITAL → AI

THROUGH THE LENS OF CULTURE LITERACY TOOLS AND AI

Historical moments of transition:

Manuscripts → handwritten, expensive, exploited for scarcity increasing value

Printing Press → Led to standardization and authorship, mass production, but still laborious

The Typewriter → Improved efficiency, uniformity, professionalism, cumbersome

Computers/Word Processors → Revision became a process of writing, recursive editing, efficiency improved

AI tools → Generative, not limited like the others, breaks the norm

Handwriting, typewriters, word processors teach linear thought and structure while computers enable recursive editing and AI is a brainstorming powerhouse infusing algorithmically programmed syntax across the World Wide Web in seconds to generate multiple layers of thought beyond human capacity. Insert FEAR here.



The Evolution and Adaptation of Writing Tools Through Remediation

WRITING TOOLS HAVE ALWAYS BEEN IN SOME WAY “CO-AUTHORS” HISTORICALLY THE PENCIL, THE TYPEWRITER, THE COMPUTER, AND NOW AI.

A Case for Multimodality

GUNTHER KRESS: THE INFORMATIONAL LOAD IN SOCIETY HAS SHIFTED FROM PRINT TO DIGITAL AND THE CANON SHIFTS ALONG WITH IT. SOCIAL SEMIOTIC THEORY GOES BEYOND THE MEANING CONVEYED IN AN IMAGE TO ALL MODES OF COMMUNICATION

REMEDICATION: NEW MEDIA IS FASHIONED THROUGH THE LENS OF OLD MEDIA TECHNOLOGIES (JAY BOLTER)

“THE MEDIUM IS THE MESSAGE” (MARSHALL MCLUHAN)

EACH TECHNOLOGY IN ITS PRIME CHANGED WHAT IS CULTURALLY CONSIDERED “GOOD WRITING”





MODE: LINGUISTIC MEDIUM:

- AI Interaction & Prompting
- AI Content & Verification
- AI for Problem Solving
- AI for Communication & Creativity

The Shifting Ecological Landscape of our Classrooms

AI IS A LITERACY TOOL AND SKILL TO LEARN

- PROMPTING, BRAINSTORMING, CREATIVITY
- EDITOR, GRAMMAR SUGGESTER BEYOND SPELLCHECK
- BLURS THE LINES OF AUTHORSHIP
- DRAFTS AND FINAL DRAFTS ARE REMIXED BETWEEN HUMAN AND AI: INDIVIDUALS ARE RESPONSIBLE FOR THEIR FINISHED WORK AND AI IS HELD LIABLE FOR ITS OUTPUT



The Writing Process using AI

PREWRITING → BRAINSTORMING ASSISTANT

DRAFTING → STRUCTURED OUTPUT FOR OUTLINES
(PROMOTING EFFICIENCY)

REVISION → CRITIQUE + REFINEMENT (AFFORDING
NEW IDEAS FOR CLARITY)

EDITING → FOR STYLE AND CLARITY & MISTAKES

The Rhetorical Canon Then and Now

ARISTOTLE (ETHOS, LOGOS, PATHOS) KAIROS

CICERO (INVENTION, ARRANGEMENT, STYLE, MEMORY, DELIVERY)

KENNETH BURKE'S PENTAD (ACT, AGENCY, AGENT, SCENE, PURPOSE)

DOUGLAS EYMAN'S DIGITAL RHETORIC THEORY (INVENTION, ARRANGEMENT, STYLE, DELIVERY, MEMORY)

Rhetorical adaptations because of technologies



THINGS TO THINK ABOUT:

WHAT IS LITERACY TODAY?

IS GENAI PROMPTING A RHETORICAL ACT?

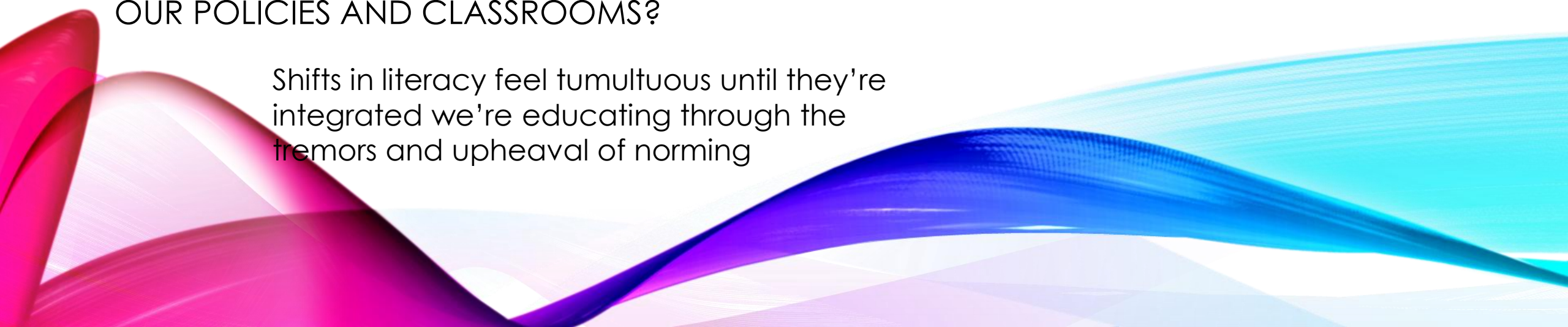
WHERE DOES LEARNING AI HELP CURATE ASSIGNMENTS?

DOES AI HINDER LEARNING? HOW?

WHAT IS ESSENTIAL TO PRESERVE ACCORDING TO TRADITIONALIST PRINT-CENTRIC VIEWS? HOW CAN WE COMBINE THEM USING A HYBRID PEDAGOGICAL FRAMEWORK?

WHAT ARE THE COLLEGES MISSION, VISION AND VALUES AND HOW TO THEY FACILITATE OUR POLICIES AND CLASSROOMS?

Shifts in literacy feel tumultuous until they're integrated we're educating through the tremors and upheaval of norming





AI Literacy beyond the page:

Prompting as rhetorical situation: CORE method of prompting

Critical Thinking is changing: Vetting AI through assignments and student engagement What works well with AI and what fails? Reflection and analysis through project-based learning

Metacognitive rhetorical awareness

Opportunity to analyze and teach AI-generated rhetorical awareness

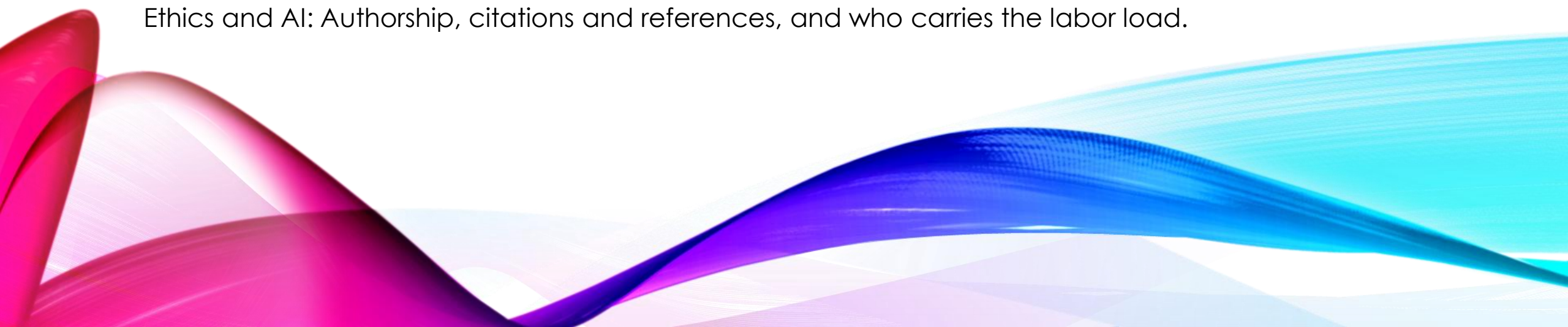
Practice ethical attribution through transparency and guidelines

Mini Course for AI: Open ChatGPT.com and Google.Gemini.com

WRITE TWO PROMPTS AND COMPARE THEM: SIMILARITIES/DIFFERENCES AFFORDANCES AND CONSTRAINTS

Learning the differences between human voice, AI-generated voice and tone and structure of sentences.





AI is a series of literacy skills that are teachable, not just digital skills for tech gurus.
Prompting and design/ Output (clarity, iterations, bias, hallucinations, usefulness)
Ethics and AI: Authorship, citations and references, and who carries the labor load.

AI ASSIGNMENT EXAMPLES & SYLLABUS POLICIES

AI Assignment Examples: Text Gen Ed

Importance of Syllabus policies

Maintaining process logs (documentation for original work)

Prompt Reflections: Students submitting work with AI benefit from reflection

Comparative drafts for critical analysis (importance of critical pedagogy)

Learning Outcomes: rhetorical awareness including AI-generated writing and iterations

Ethical attribution: Teaching authorship, credibility, and agency



Normalizing AI Practices inside the classroom

POLARIZING AI DISCUSSIONS AREN'T EFFECTIVE & NEITHER IS PROHIBITION OF AI

SYLLABI POLICIES ARE INDIVIDUAL BUT SHOULD ALL HAVE:

- COMMUNAL TERMINOLOGY (CONTINUITY FOR STUDENTS)
- STRIVE FOR SIMILAR LEARNING OUTCOMES



Challenges of AI in the Classroom

FEARS, CONCERNS, CONSTRAINTS, & CHALLENGES:

- OVER-RELIANCE ON GENAI TOOLS (IMPEDE LEARNING)
- EQUITY AND EQUAL ACCESS (FREE, PAID VERSIONS, HOME)
- SHIFT IN WORKLOAD, ASSIGNMENTS AND REDESIGN, TRANSPARENCY, AND ASSESSMENT, TIME-CONSTRAINTS,



Opportunity: Trial & Error Classroom Experimentation and AI Practice

ALLOWING STUDENTS TO BECOME CO-CREATORS
AFFORDING STUDENTS OPPORTUNITIES TO FURTHER THEIR
EDUCATION THROUGH USE OF OPEN ACCESS GENAI
SOURCES

CLASSROOMS ARE INTENDED TO BE SAFE, AFFORD TWO-
WAY OPEN COMMUNICATION (HUMANS WERE THE
ORIGINAL BRAINSTORM PARTNERS)





POLICIES

TRANSPARENT INTEGRATION WITH CONDITIONAL
USAGES AND SOLID RESTRICTIONS FOSTERING
STUDENT ACCOUNTABILITY AND CIVIC
RESPONSIBILITY

From Consumers to Producers

STUDENTS WERE BORN CONSUMING MEDIA TECHNOLOGIES AND HAVEN'T BEEN TAUGHT HOW TO HAVE TECHNOLOGY WORK FOR THEM TO ADVANCE THEIR LEARNING THROUGH PROPER STRUCTURE, GUIDELINES, ASSESSMENT RUBRICS, AND STUDENT REFLECTION PRACTICES STUDENTS WILL MASTER TECHNOLOGIES OF THEIR TIME INSTEAD OF BEING RUN OVER AND FEELING LIKE THEY NEED TO CATCH UP TO A SOCIETY THAT FAILED TO TEACH THEM





References