Detecting Bull... in an Interdisciplinary Community of Learners

Adrienne Button, MLIS, MS. Elizabeth Harrison, Ph.D. Tom Lilly, Ph.D. David Minchew, MLIS

This poster presents the process and results of how a group of professors from different disciplines used the ADDIE model of instructional design to build a three-course interdisciplinary learning community dedicated to teaching students how to detect and deal with bull... in public and scientific discourse. The poster includes information on how we developed shared learning outcomes and integrative assignments, and our reflections on the success and challenges of teaching in this learning community. We will also discuss our students learning in not only our content areas, but also in terms of developing their meta-literacy and critical thinking skills. In short, we will show you how we helped our students become more capable bull... detectors.

Why a Learning Community?
Why Learning Communities at GGC
- USG Momentum Initiative: System-level priority on increasing pass rates of catapult courses and graduation rates
- NASA/33 Lumina Grant: Multi-system grant to increase equity and access to success through HIPs implementation
- College Strategic Plan: College-level operationalization of plans to increase retention and graduation through practices and strategies that promote acculturation, community engagement, mentorship, and career readiness

Learning Communities were one of two HIPs the college adopted to respond to these initiatives

Why These Courses? Why This Topic?
Harry Frankfurter’s 1986 essay “On Bullshit” argues that bullshit is speech that is intended to persuade without regard for the truth. “To care about the truth and try to hide it, the bullshitter doesn’t care if what they say is true or false, only whether the listener is persuaded or not.” Facilitating the development of students’ abilities to detect, examine, and reflect bullshit is an increasingly important skill in our current socio-cultural/political reality. This is particularly true because of the overabundance of information available online, the prevalence of self-confirming echo chambers, and the changing nature of authority and expertise, particularly within public and scientific discourse. We need our students (as future leaders and citizens) to be able to determine whether or not they are encountering relevant and reliable information and to be able to analyze and communicate that information to their own discourse communities. However, this type of learning is bigger than one course or one discipline. We think that this kind of deep learning, that involves students developing metaliteracy, metacognition, and critical thinking skills and mindsets across a variety of disciplines is ideally suited to an interdisciplinary and integrated learning community. To that end, we collaborated to create a new three-course general education learning community based our shared approach to critical pedagogy and innovative assessment that included aligned student learning outcomes, integrative assignments, and collaborative assessments.

The ADDIE Model of Instructional Design

Our Learning Community Courses
GGC 2000 - Introduction to 21st c. Information Literacy Information Literacy Course. Elective. 2 credits
BIOL 1102 - Biological Science II 2nd Semester Introductory Biology course for non-STEM majors. 3 credits
ENGL 1101 - English Composition I Required for all students. 3 credits

BIOL 1102
GGC 2000
ENGL 1101

Analyzing and Aligning Our Student Learning Outcomes
- Examined learning outcomes for each course
- Extracted similar themes from all three courses
- Used those themes to develop common outcomes for the LC
- Used common learning outcomes to design linked assignments

Common Outcomes – Critical Thinking & Information Literacy

BIOL 1102
GGC 2000
ENGL 1101

Implementation & Evaluation

What worked?
- Ability to intervene with struggling students
- Students display good research skills?
- Talking about being in a learning community
- Anecdotally, LC students certainly felt like they belonged
- LC geared because of GGC 2000
- Classes always engaging
- Students are still working and learning together

What didn’t work?
- Can we get more institutional support?
- Advance notice about LC’s and an easier mechanism for applying to teaching one
- Institutional expectations of LC design
- Assessment of professional/instructor practices
- Incentivize quality participation – why do this?
- And what is quality?
- Not scalable if includes GGC 2000
- Did social belonging result in increased pass rates?
- Increased retention?
- Would we do this again?
- Prepare students to perform assessment in better faith
- Address the relationship of climate change skepticism to narratives of fear and need for objectivity
- If we don’t have this team, we don’t know if we should

Designing Our Integrative Assignments and Assessments

BIOL 1102/ENGL 1101/GGC 2000: Article summary and analysis

BIOL 1102 & GGC 2000: How to spot Bad Science

BIOL 1102: Panel discussion from different perspectives (supported by work in GGC 2000 & ENGL 1101)

ENGL 1101: Bullshit portfolio

Developing Science & Information Literacy Support

“Scholarly Article Analysis Infographic Assignment” supports discovery, summary, analysis, & synthesis of scientific research

“Host a Scholarly Party Assignment” supports understanding of research as a process of iterative inquiry

Prep for panel discussion assignment supports distinguishing between well-documented scientific studies and popular opinion as well as speaking to different rhetorical situations, audiences, and purposes, particularly in terms of identifying and deflecting bullshit

The Quick Start Guides

How to preview your poster
How to print your poster

To print your poster using our same-day professional printing service, go online to PosterPresentations.com. Our Pros don’t print your poster – they help you design it. When you finish designing your poster, select the background master where you can change the template. You can also change the overall template color theme by clicking on the button below to see the tutorial here: https://www.posterpresentations.com/helpdesk.html

If you submit a PowerPoint document, you will be receiving a PDF proof for your approval prior to printing. If your order is placed and paid for before noon (Pacific time) Monday-Friday, your order will ship out that same day. FedEx Next day, Second day, Third day, and overnight are available for an additional fee. If you don’t have this team, we don’t know if we should

If we don’t have this team, we don’t know if we should


Reflection & Refinements

The scientific community is committed to scientific research. Use all evidence to support your findings. Use all evidence to support your findings. Use all evidence to support your findings. Use all evidence to support your findings. Use all evidence to support your findings. Use all evidence to support your findings. Use all evidence to support your findings. Use all evidence to support your findings. Use all evidence to support your findings. Use all evidence to support your findings. Use all evidence to support your findings. Use all evidence to support your findings. Use all evidence to support your findings. Use all evidence to support your findings. Use all evidence to support your findings. Use all evidence to support your findings. Use all evidence to support your findings.