# FHSU General Education Committee Minutes 

Meeting Called by
Glen McNeil, Chair

Date: Thursday October 20, 2022
Time: $\quad 3: 30-4: 30$

Location: Rarick 107

Members
Douglas Drabkin (AHSS)
Marcella Marez (AHSS)
Christina Glenn (BE)
David Schmidt (BE)
Sarah Broman Miller (Ed)
Sohyun Yang (Ed)
Denise Orth (HBS)
Tanya Smith (HBS)
C.D. Clark (STM)

Todd Moore (STM)
Robyn Hartman (Lib)
Justin Greenleaf (Senate)
Emma Day (SGA)
Cheryl Duffy (Goss Engl)

3:30 (1 minute) All members were present with the exception of Glenn and Miller. Schmidt served as proxy for both Glenn and Miller. Determined that a quorum was met.

3:31 (seconds) The minutes from the previous meeting were approved.

3:31 (3 minutes) Chair warned the committee that Workday is having problems with course proposal routing. For the foreseeable future, if a course proposal comes our way, he recommends that we ignore it until it appears in the work-of-the-week folder on Teams.

3:34 (2 minutes) The committee considered a revision of the proposal for ECON 202: Principles of Macroeconomics to satisfy the 2.1F outcomes (social scientific mode of inquiry). The discussion having occurred on Teams, there wasn't much to talk about. The committee voted to recommend approval of the proposal, but for it not to be sent on to Academic Affairs until the information in the department's recent explanatory letter -- that quiz 3 is to measure outcome 1 , that quiz 1 is to measure outcome 2 , and that quiz 2 is to measure outcome 3 -- is made explicit on the rubric itself.

3:36 (8 minutes) The committee considered a proposal for PHYS 312: Scientific Computing and Productivity to satisfy the $\mathbf{1 . 3}$ outcomes (computing literacy). The committee judged everything to be in order here -- course design, assignments, and rubrics -- and voted to recommend approval of the proposal: 11 in favor, 1 abstaining, 1 opposed.

3:44 (2 minutes) Clark drew attention to the continued work of the KBOR-CORE working group, referencing a set of documents he sent out to committee members by email this afternoon. They appear below as Appendices A-H There was no discussion of this work during the meeting. Committee members are encouraged to ask questions or provide feedback through the "Gang of 6" forum that has been set up in Teams.

3:46 The meeting ended. Our next meeting is scheduled for Thursday October 27, same time, same place.

Submitted by D. Drabkin, Recording Secretary


## Appendix A (notes from the KBOR-CORE working group's fourth meeting):

Jill joined the meeting for the first thirty minutes to see how everything was going and answer any questions. Question that were discussed:

1. Will courses be allowed to satisfy multiple requirements? CORE was designed assuming that courses in a student's major would satisfy requirements, is this still the case.

Yes, it certainly can be. There is no KBOR policy that says a history student can't take a history course that counts toward their general education hours and their required 30 hours of department courses.
2. How will transfer courses work? If the previous institution counts a course as a general education course, but it is not on our approved list, what happens?

If the student finishes the 35 hours of general education before transferring, they do not have to take any additional general education courses here. If the student has taken a system-wide transfer course (https://www.kansasregents.org/transfer_articulation) it will count here. If the student take a course that is not on the system wide transfer list, it will not count, but can still contribute the 120 total hour requirement for graduation as a free-elective.
3. Will AP credits still be accepted?

Yes, that will work just as it has in the past. We have been seeing fewer of those cases in recent years, but a student that takes AP exams and scores high enough to receive credit will be able to satisfy general education requirements.
4. Will the new program be flexible, will it be able to easily change and adapt? If so, what would that look like?

Yes, it should. We have to be constantly revising the program to meet current needs. If an outcome set is modified, then courses satisfying the old outcome set will probably be given a grace period to update to the new set (say three years), but then be risk being dropped from the program if they do not update the course.
5. Will performance art count at FHSU?

This is something that will have to be decided, and we have not really discussed it yet.
6. We have discussed the possibility of attaching information literacy to senior level graduation requirement. The idea would be that programs would be able to choose the genre of writing that made the most sense for their majors, but there would be a requirement that the student produce some sort of artifact that demonstrates information literacy while writing the document. The programs would also need to demonstrate the students were being taught information literacy, not just asked to produce an artifact. If the programs did not want to add this requirement to their own class, they could make a course on information literacy a prerequisite instead. Is this something that would be acceptable?

Yes, when Jill said she would not support making a bunch of graduation requirements, she just meant that we should not try to add any and all of the CORE outcome sets that don't have a natural place in the KBOR framework to graduation requirements. She is fine with developing what the senior level writing outcome set looks like.

Jill left for another meeting and we picked up the conversation from Monday.
We started by summarizing where we think we are. In our last meeting we had discussed Intercultural Competence and the possibility of cutting it because it was noted that many of the classes currently listed there are either intended for majors (Global Nursing Experience Practicum) or have a pre-requisite that is already a General Education course (Social Psychology requires Into to Psychology).

There was disagreement on this issue, the main point being that removing the outcome set feels like saying we don't value intercultural experience. But in general, the committee seems to feel that if an outcome set needs to be dropped, this is a likely choice. The courses that are currently approved for this outcome set could be asked to submit a proposal for social science or arts and humanities, since all but perhaps one would be classified that way. And with the difficulty courses have had trying to satisfy the committees to get courses approved here, they may prefer that. With CORE, departments needed to submit their own courses (courses that would not be taken by other majors) for different outcome sets in order to reduce the number of hours required by the program. This is no longer an issue.

Next we discussed critical thinking. There are several options here.

It could be put into the Arts and Humanities Discipline Area (AHDA) with Aesthetic, Historical, and Philosophical mode of inquiry. This is the most obvious alignment with the KBOR framework, the Critical Thinking course offered by the philosophy department is a system-wide transfer course and is considered a philosophy course by KBOR.

A similar option would be to merge philosophical mode and critical thinking into a single outcome set that would be used to assess philosophy classes. Ginger spoke with faculty from the philosophy department, and they don't think this would be feasible. The Critical Thinking course is significantly different than a philosophy course.

The other option is to put the critical thinking outcome set in the Institutionally Designated Area (IDA). It was noted that doing this would give programs the option to develop their own critical thinking courses. If the critical thinking outcome set was used to assess AHDA courses, it would imply that only courses in that area could be used to meet the outcome.

There is disagreement on whether critical thinking should be a standalone outcome set/course. The argument was made that it is an important skill that should be infused throughout multiple courses in a student's curriculum. Others feel strongly that it should be a standalone class, but acknowledge that like writing and oral communication it is part of all we do.

If critical thinking is kept as a standalone outcome set, and put into IDA, then there is disagreement on whether it should be required of all students. Some feel very strongly that it absolutely should be required of all students, other feel strongly that it absolutely should not be required of all students.

In support of it being required of all students, the argument is that it is a fundamental skill that students need, especially in today's environment. It is as fundamental as written and oral communication and should therefore be required of all students. Though other classes (regardless of discipline), of course, ask students to engage in critical thinking, they do not do so in a manner that is fully devoted to discussion of the key elements of critical thinking in a systematic, sustained manner. It's simply not the case that classes within the majors consistently and deliberately guide students through logical fallacies, types of claims, and the variety of types of evidence that are brought to bear in arguments. Courses in the major often have much content to teach alongside critical thinking (or written and oral communication). Critical thinking is not thoroughly taught in high school. In fact, there is often no exposure to these matters, and we, as a responsible faculty, should ensure that these critical skills are taught in a systematic way to all students. A required class in critical thinking will help students learn to reason well. This class will, like required classes in written and oral communication, enable students to succeed in their majors and, in fact, provide a foundation for classes that require them to advance their critical thinking skills and apply them to specific disciplines. Moreover, one reason to support requiring Critical Thinking of all students is that it is a skill and knowledge base that is critical to supporting a student's preparedness to engage in a democratic culture, especially in a context where weak evidence and fallacious arguments proliferate. Critical thought, a skill that spans disciplines, is a vital skill for citizens in a democracy. In this Gen. Ed. framework, we have the instrument to ensure that it is taught. There is nothing wrong with occasionally being prescriptive in our Gen. Ed. Oral Communication is a "must take" class for students because, in part, being able to speak publicly is a critical part of democracy. People need to be able to stand up in school board meetings and voice their
minds, and classes in oral communication help students be able to do so. Classes in critical thinking help ensure that they'll be able to make cogent arguments when they do speak or detect fallacious arguments when they hear them in any number of contexts. Moreover, this new framework already provides considerable choice and flexibility to students because the CORE is shrinking. It's important to give all students a rigorous, thorough, and systematic education in, as bell hooks put it, "the gift of critical thinking." And we should do so.

In support of making it optional, it would provide more choice and flexibility. The sciences, for example, integrate a lot of critical thinking into their courses, it is a crucial piece of doing science. [Note from Smalley: So do all the humanities-I don't understand this objection, and I think this should be clarified.] If it was made optional, then the programs could decide what is more important for their students. So far, this seems to the most difficult question.

The point was made that there are programs with students that do benefit from the computer literacy course, and would like to have that course an option.

The meeting shortly before 9 so that members could go to class. We are planning on meeting again next Friday (10/14/2022), for a two hour block to try to hammer out some of these more complicated details.
[submitted by C.D. Clark]

## Appendix B (notes from the KBOR-CORE working group's fifth meeting):

Since our last meeting, we have received multiple communications in support of various outcome sets being included in the new General Education Program. These include an argument for requiring persuasive writing beyond Composition I and II, details about INF 101 and the value it provides to the student, a response to Philosophy's argument that critical thinking be made a required course, a response to the response that critical thinking be made a required course, and a guide to frequently asked questions about information literacy.
See attachments for details.
Discussion started with a review of where we left off with Institutionally Designated Area (IDA) and University/Graduation requirements. Most feel that the Critical Thinking (CT) outcome set should be kept stand-alone, rather than merged with the Philosophical mode of inquiry, and that it should be placed in the IDA. The main question is whether it should be required or part of a set of options.
There is general support for making CT a requirement in the IDA (i.e. all students will take a CT course and one other course). If this were the case, we would want it to be understood that other departments could offer courses in critical thinking and these courses should not run into needless resistance from review committees. Each field has their applications of critical thinking, and these should be included, provided a shared sense of the course objectives is maintained. The philosophy department has said in the past that they would be happy to help with developing new critical thinking courses.
We then discussed a potential solution for the critical thinking, persuasive essay, senior-level writing, and information literacy outcomes. There has been discussion in previous meetings about attaching information literacy outcomes to the senior level writing and dropping the persuasive essay outcome set so that programs could have more flexibility in the type of writing they require of their majors, as long as they demonstrate that they will require a significant writing project that requires some research and use of information sources, and that their students will be taught how to use information resources at some point, this should be sufficient. If the persuasive essay outcome set was combined with the first two critical thinking outcomes:

By graduation, students will:

1. Sort claims according to the kinds of evidence that could be used to establish their truth, and the kinds of expertise that would be relevant to evaluating this evidence;
2. Evaluate arguments of various kinds (identify when an argument is being made, what its conclusion is, what the logical relation between premises and conclusion is purported to be, whether the premises are plausible, and whether the conclusion is established);
3. Write a persuasive essay that includes the following:
a. a clear and debatable thesis,
b. fully developed and supported ideas,
c. clear organizational structure,
d. effective consideration of opposing arguments,
e. use of credible sources,
f. appropriate documentation of sources,
g. consideration of a target audience,
h. conventional grammar and mechanics.
(Perhaps some of the writing outcomes would need to be dropped or modified to make this work well) Something like the third CT outcome could also be retained, but the reference to the student's discipline would need to be removed.

The senior-level writing and information literacy outcomes sets could then be combined into a graduation requirement:

1. Produce a discipline-specific document judged proficient according to a department approved rubric in the student's major.
2. Outcomes that describe effective use of information resources (to be written)

All members of the group seemed to like this idea. Some of the benefits/advantages that were expressed with this organization were:

1. It would make more sense to make a course covering both CT and persuasive writing a required course in the IDA.
2. Students would have a third course that develops persuasive writing skills, something that the Writing Across the Curriculum committee feels is important.
3. Programs would not have to submit writing courses for review by Gen Ed and would have the freedom to choose a type of writing that makes sense for their majors. For example, writing a research proposal, a mathematical proof, a safety program, or a patient care plan, should all be forms of writing that programs could require of their students, as long as they are backed by Information resources.

With the combination of outcome sets, then the only outcome sets that remain to be considered are Computer Literacy, Dimensions of Wellness, Financial Health, and Intercultural Competence.
In past meetings, we had discussed the possibility of dropping Intercultural Competence (IC) since we noted that several of those courses could either be considered social science, or are classes that only majors would take. Some of the course in IC are appear as with minor revision they would be automatically included as SWT courses in KBOR so they will likely remain part of the GenEd framework. There was some dissatisfaction expressed with simply dropping the outcome set, and we noted that it could, perhaps, be combined with Engaged Global Citizens (EGC). The two seem to be related and are worthwhile goals.
It was noted that, in practice, both the IC and EGC outcome sets have been a challenge for courses to get approved. Courses that have been submitted have been criticized for not including a "personal interaction" that is personal enough, or not guaranteeing that students will consider issues that are "boundary-spanning" enough. The general sentiment by the group is that courses that advance the student toward these goals would be great to have in the General Education program, but with what has happened in the approval process over the past two or three years since the implementation of CORE began, we are not confident that this would be any better with the current outcome language.
There was discussion about how to include Computer Literacy, Personal Finance, and Dimensions of Wellness courses in the second IDA slot. These outcomes sets could either be listed as is, with the student or program picking one, or a new outcome set that encompasses a common goal could be used. For example, these courses could all be placed under a "Personal and Professional Development" outcome set, which would allow for other classes with similar objectives to be included as well. It was noted that, however these courses are included, courses that only focus on mental health areas of wellness should fall under this category. With a general plan in place, the group decided to start writing up a draft recommendation to see how everything fits together. When complete, the recommendation produced by the group will include a proposed layout for the General Education program and rationale for the choices made in each Designated Area.
[submitted by C.D. Clark]

# INFORMATION LITERACY 

FAQs and Infographics

- What is information literacy?
- What are the standards related to information literacy?
- What does the literature say?
- How does information literacy relate to...?
- Don't students already know this?
- Current FHSU Information Literacy Instruction
- Proposed Objective and Outcomes
- Delivery and Assessment
- References



## What is Information Literacy?

Information Literate Learners are able to:


## Identify Information Needs

Key Knowledge:
What is the scope of the problem or research question? What are the key concepts? What types of information are needed to meet the need? Who are the interested parties in the topic? Where are the information gaps in the field?

## Locate Information Resources

Key Knowledge:
What formats is the needed information in? What locations or finding tools? What are the best search strategies for those tools? How can the search process be refined in the face of challenges?

## Evaluate Information Resources

Key Knowledge:
What criteria are relevant for choosing sources? What perspectives and diverse or underrepresented voices need to be included in the scholarly conversation? What makes a source authoritative? How do these sources contribute to the field?

## Use Information Resources

Key Knowledge:
How can the information be organized, synthesized, and communicated? How can I contribute to the scholarly conversation?


## Share Information

Key Knowledge:
What is the most appropriate format to share this information with others? How can the information resources be appr opriately acknowledged, attributed, or cited? What is the educational, financial, or legal value of the information?

## What are the Standards, Outcomes, \& Frameworks related to Information Literacy?



## Essential Learning Outcomes VALUE Rubric

Determine the Extent of Information Needed
Access the Needed Information
Evaluate Information and its Sources Critically
Use Information Effectively to Accomplish a Specific Pur pose Access and Use Information Ethic ally and Legally

## ISTE Standards for Students: Knowledge Constructor

Students critically curate a variety of resources using digital tools to construct knowledge, produce creative artifacts and make meaningful learning experienc es for themselves and others.


Competencies for a Career-Ready Workforce related to
Information Liter acy
Critic al Thinking: Identify and res pond to needs besed upon an understanding of situational context and logic al analysis of relevant information.

Equity \& Inclusion: Demonstrate the awareness, attitude, knowledge, and skills required to equit ably engage and include people from different local and global cultures.

Technology: Understand, and lever age tec hnologies ethic ally to enhance efficiencies, complete tasks, and accomplish goals

## What does the literature say?



Shao \& Purpur, 2016; Bowles-Terry, Blake, Pearson, \& Szentkiralyi, 2017; Gaha, Hinnedeld, \& Pellegrino, 2018; De Paor \& Heravi, 2020; Rowe, Leuzinger, Hargis \& Harker, 2021; Jones \& Mastrorilli, 2022

## How does information literacy relate to...?



Critical Thinking

FHSU's Department of Philosophy defines critical thinking as "the activity of identifying, analyzing, evaluating, and formulating various types of arguments - reasons given in support of claims." Critical thinking and information have several qualities that go hand in hand, especially when evaluating evidence or information.

Davis (2O10) notes, "Without information liter acy, students would find themselves equipped to think about situations and ideas but incapable of recognizing and understanding the vast information network or how to access it. Alternately, without critical thinking, we would have vast amounts of information with no way to filter, gather, or synthesize this information."

However, she cautions against subsuming information literacy into critical thinking, as dedicated information liter acy instruction allows students to develop informationseeking strategies that can meet varying information needs across a widerange of academic, personal, and workplace situations: "There is an everyday use for information literacy that would be lost if it were to disappear into or merge with critical thinking and obscure its importance by calling it anything other than information literacy."

The information and technd ogy landscapes are both changing rapidly. Information is encountered daily in multiple forms and modalities, including print and electronic content such as books, photos, videos, podcasts, blogs, government
information, and social media. (Davis, 2010)
Information literacy goes beyond teaching students how to use a technology tool. Instead, it has them think about information access, evaluation, and use in the aggregate-for example, how
to match information needs and search strategies to appropriate search tods, not just where to click in a specific research database like JSTOR or how to assess the fit between an information product's creation process and a particular information need, not just how to format a paper in MLA style in


Technology

Microsoft Office (ACRL, 2015).


Writing

Writing, especially Writing Across the Curriculum (WAC), and information literacy share common ground as movements in higher education (Elmborg, 2003). Torrell (2020) highlights these in her case for critical information literacy (CIL) across the curriculum, not just in one-shot instruction sessions.

She writes: "Possibly, we have not looked up from our day-today responsibilities long enough to see a changed and still shifting information landscape, or to realize that the internet is no longer a discrete zone we can choose to enter, but instead it is now part of our everyday lives. Or perhaps we have glimpsed these changes, but we have quickly averted our gaze... because if we really look, we'd recognize that we're going to need something significantly more far-reaching than making arrangements for a librarian toteach our students research skills during one day of our class. We are going to have to figure out how to make room for teaching not just an additional skill, not just a body of knowledge, but a way of critical thinking and interfacing with information."

Both WAC and information liter acy help develop critical thinking skills and together provide focus to the "use" portion of "locating, evaluating, and using information resources" (Torrell, 2020; Napier et al., 2018).

WAC and information liter acy are neither a single skill learned in one class freshman year, nor apply to all situations after that. Instead, they provide students with abilities that transfer to other academic, personal, and workplace situations by creating an evolving, a daptable knowledge base. This base needs to be
sust ained and developed over time, especially as students move into upper-level courses when WAC and information literacy adapt to the contexts and conventions of a discipline.

Like WAC, integrating information literacy into the curriculum takes careful consideration. Torrell explains, "CIL [critical information literacy] needs to be developed through multiple and increasingly advanced exposures that build higher proficiency levels throughout a student's college years and include more advanced and disciplinary-specific training as students complete their majors."

## Don't students already know how to locate, evaluate and use information?

In an ongoing longitudinal mixed-methods assessment of students' information literacy skills when they first arrive at FHSU, Forsyth Library Faculty found that although $82 \%$ of students said they felt at least somewhat confident about conducting library
research, only $\mathbf{4 1 \%}$ of the first-year students accurately constructed a research strategy. $80 \%$ of the first-year students surveyed successfully evaluated information resources for credibility, accuracy, and relevancy, and $63 \%$ correctly identified the best resource for a specific information need.

From Fall 2021 Survey:
Evaluating Information


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## Current Undergraduate Information Literacy Instruction at FHSU



COMM 100 Fundamentals of Oral Communication
The Library provides one 50-minute session outlining recommended Forsyth Library resources and search strategies for the Speech 2 assignment.

In the 2021-2022 academic year, Forsyth Library taught 22 COMM 100 sections

## UNIV 101 Freshman Seminar

The Library provides one 50 -minute session introducing basic search strategies and Forsyth Library services.

In the 2021-2022 academic year, Forsyth Library taught 38 UNIV 10 sections

## Proposed Assessment Objective and Outcomes (draft as of $10 / 11 / 22$ )

Combine 1.1A.2 Written Discipline-Specific Document and Revised 1.4 Information Literacy outcomes to be assessedin an upperlevel program course. This would become an FHSU Graduation Requirement.


## Outcomes:

By graduation, students will:

1. Produce a discipline-specific written document, judged proficient according to a department-approved rubric, that includes:
a.fully developed and supported ideas,
b.clear organizational structure,
c.consideration of a target audience,
d.disciplinary-appropriate grammar and mechanics.
2. Produce an integrated or supporting artifact related to the discipline-specific written document, demonstrating the proficient use of information resources according to a department-approved rubric that includes:
a.identification and location of information sources,
b.evaluation of sources according to discipline-appropriate criteria, c.disciplinary-appropriate documentation of sources

## Delivery and Assessment

The assessment of these outcomes is intended to be integrated into an upper division (300 or above, or Jr/Sr levels) course in the student's major program. The skills to master these outcomes can be part of:



A departmental plan of scaffolded writing and/or information literacy instruction throughout courses in the program.


Requiring students complete UNIV 301 Information Literacy and/ or UNIV 402
Upper-Level Writing

## Some discipline-specific document ideas:

action-research plan
research paper analytical essay
business proposal
discipline-specific communication
poster presentation
discipline-specific report
research proposal
persuasive essay

Some integrated or supporting artifact ideas:
annotated bibliography
literature review

## References

Association of American Colleges \& Universities (AAC\&U). (2009). Information Literacy VALUE rubric. https://www.aacu.org/initiatives/value-initiative/value-rubrics/value-rubrics-information-literacy

Association of College and Research Libraries (ACRL). (2015, February 9). Framework for information IIteracy for higher education. American Library Association. http://www.ala.org/acrl/st andards/ilframework

Bowles-Terry, M., Blake, J., Pearson, S., \& Szentkiralyi, Z. (2017). The impact of information liter acy instruction on student success: A multi-institutional investigation and analysis. Fondren Library Research,13. https://scholar.smu.edu/libraries_cul_research/13

Davis, H. (2010, Feb 3). Critical literacy? Information! In the Library with the Lead Pipe. https://www.inthelibrarywiththeleadpipe.org/2010/critical-literacy-information/

Fort Hays State University. (2019, November 4). FHSU CORE: Common outcomes for relevant education. Fort Hays State University https://www.fhsu.edu/liberaleducation/fhsu-core-goals-objectives-and-outcomes-11-4-191.pdf

Gaha, U., Hinnefeld, S., \& Pellegrino, C. (2018). The academic library's contributionto student success: Library instruction and GPA. College \& Research Libraries, 79 (6), 737.

International Society for Technology in Education (ISTE). (2017). ISTE Standards: Students. ISTE. https://www.iste.org/standards/iste-standards-for-students

Jones, W. L., \& Mastrorilli, T. (2022). Assessing the impact of an information literacy course on students' academic achievement: A mixed-methods study. Evidence-Based Library and Information Practice, 17(2), 61-87.

Napier, T., Parrott, J., Presley, E., \& Valley, L. (2018). A collaborative, trilateral approach to bridging the information literacy gap in student writing. College \& Research Libraries, 79(1), 120. https:// doi.org/10.5860/crl.79.1.120

## References

National Association of Colleges and Empl oyers (NACE). (2022). Career readiness:
Competencies fo a career-ready workforce. https://www.naceweb.org/career-
readiness/competencies/career-readiness-defined/

Nickerson, C., Hovinga, K., Hartman, R., Landis, C., Squire, B., \& Wade, M. (2022, April 20) Incoming first-year student information literacy assessment [Poster Presentation] Fort Hays State University Scholarly and Creative Activities Days.

Rowe, J., Leuzinger, J., Hargis, C., \& Harker, K. R. (2021). The impact of library instruction on undergraduate student success: A four-year study. College $\&$ Research Libraries, $82(1), 7$.

Shao, X., \& Purpur, G. (2016). Effects of information liter acy skills on student writing and course performance. The Journal of Academic Librarianship, 42 (6), 670-678.

Torrell, M. (2020). That was then, this Is wow: A case for critical information literacy across the curriculum. Communications in Information Literacy, 14 (1), 118-133. https://doi.org/10.15760/comminfolit.2020.14.1.9

## Appendix D (Persuasive Writing Outcome Rationale):

To: The G6 Committee
From: Cheryl Duffy
RE: Persuasive Writing Outcome
Date: 10 October 2022
Regarding the upper-level CORE writing outcomes, I have read in the G6 updates that there is concern that "the 'persuasive essay' language is too narrow for some programs." I have heard some discussion of keeping the "discipline-specific document" but removing the "persuasive essay" from our CORE writing outcomes.

As the chair of the Writing Across the Curriculum Committee that wrote that persuasive-writing outcome, and as a seven-year member of the GenEd Committee that approved that outcome, I'd like to take a moment of your time to address that concern and provide what might prove to be a helpful context for how and why that decision was made. Full disclosure: My goal is to convince you that retaining the persuasive outcome is necessary and practical: It should be done, and it can be done.

After quite literally years of study and deliberation, the GenEd Committee established three overarching goals, the first of which was called Goal 1: Core Skills-and the very first objective under that first, fundamental goal was Objective 1.1: Written and Oral Communication. The WAC Committee-consisting of representatives from all five colleges-proposed two outcomes to measure that objective, the first of which was Outcome 1.1A1: Write a Persuasive Essay. The GenEd Committee subsequently approved that outcome.

That top outcome-persuasive writing-emerged organically out of a very real concern that in this democracy, too many well-educated citizens seem unable to detect weak arguments and, likewise, often seem unable to offer sound, well-structured and supported arguments of their own. Having a degree from a liberal arts college ought to mean one has facility with evaluating and making persuasive arguments. Such facility will serve graduates as they make decisions in their careers and, more importantly, as they make decisions as voters and policymakers in a democracy. Yes, it's that foundational and that lofty an outcome.

Moreover, as additional institutional context, I'd like to take us back to 2005, when concern was raised about FHSU's poor showing on the NSSE survey (National Survey of Student Engagement). When reporting on the amount of writing they did, FHSU students reported far less writing in their college career than did students from peer institutions. That fact was troubling, given what is commonly understood about the value of writing to both generate and solidify the thinking and learning students at the college level are expected to develop. A fleeting attempt to develop a Writing Intensive Program at that time never really took hold for reasons too numerous to discuss here-but I'd say mainly it failed because it was mostly a top-down initiative. That's why the two upper-level writing outcomes later developed by faculty on the inclusive WAC Committee and approved by the even more broadly inclusive GenEd Committee are so vital and, I hope, enduring. They were developed and approved by faculty committed to ensuring FHSU students can think and write with the depth and proficiency expected of university graduates.

As one of just two of those outcomes deemed critical for our students, persuasive writing should remain a requirement. And if the persuasive essay is retained as a graduation requirement, I understand that logistical questions remain. Let me try to answer some of them:

## Don't students already learn persuasive writing in ENG 102 English Composition II?

Having taught ENG 102 for decades-at Colby Community College, at the University of Kansas, and (for 30 years) at Fort Hays State University-and having earned my PhD with an emphasis in composition studies-and having directed two writing centers and served as Director of Composition for many years as well, observing faculty and reading final assessment essays-I am in a good position to answer this question. And the answer is this: Well, kinda. Students certainly do receive an introduction
to the concepts of effective persuasive argument as freshmen in ENG 102, and most of them develop an introductory level of proficiency. But you can ask anyone who teaches ENG 102, and they will tell you that few students leave the course having mastered the complex skill set required to write a truly proficient persuasive argument. They simply need more time to mature as thinkers and writers-and they need more practice.

If the plan, then, is to have that outcome met as a graduation requirement within departments (i.e., within a course in a student's major)—what about departments that, as noted above, see that "persuasive essay" language as too narrow for their programs?

Even members of the WAC Committee have, in hindsight, regretted the use of the word essay, as we recognize that persuasive arguments come in many forms. We tried educating departments (through workshops and Professional Development Day sessions) about the latitude they would have in defining "persuasive writing." For example, a scholarly article reporting on research could easily be seen as making a persuasive argument supported by outside sources. An argument for increased performances of a little-known composer could, likewise, be an example of persuasive writing. And so on.

## But what if a department still, nevertheless, does not see a way to include persuasive writing in their courses for their majors?

In such a case, it could be possible to have that outcome met outside of the department. What might that look like? Consider these possibilities (each with its own peculiar advantages and disadvantages):

1. A UNIV 402 Upper-Level Writing course is already in the works within the GenEd CORE and would be available for students whose departments do not meet upper-level writing outcomes within majors courses. Considering that our GenEd requirements are moving from 55 hours to something closer to 37 hours, students in those few majors would likely have room in their schedule for UNIV 402.

OR
2. Certain courses accepted into the KBOR-approved GenEd curriculum could be identified as courses that include the persuasive writing piece, and departments could require that students in their program(s) take such a designated course when students are meeting their GenEd requirements. This option would not add any additional hours to a student's program of study.

OR
3. A required Critical Thinking course has been suggested for the GenEd program (and an informal email poll among current WAC Committee members found widespread support for such a requirement). It might be possible, should such a course be required, that a persuasive writing assignment could be included to meet both critical thinking and persuasive writing outcomes. This would make the most sense if ENG 102 were listed as a prerequisite for the Critical Thinking course.

And if you've read this far (!), thank you for hearing me out. Obviously, I felt there was much to be said. I don't envy your task, but I do appreciate your willingness to undertake it with an open mind and with our students' best interests at heart. I hope you can see that the persuasive writing outcome has been considered fundamental and vital by both the WAC Committee and the GenEd Committee. Finally, I would be happy to attend one of your meetings to discuss these ideas further.

## Appendix E (Olds Comment to GenEd and Academic Affairs):

I a m writing in regards to the document submitted by Carl Miller from Philosophy titled, "The Case For Requiring a Critical Thinking Course in the New General Education Program," that is included in the September $29^{\text {s }}$ General Education Committee minutes (Link), and is a ttached with the email that includes this message. I a m dismayed that the work of the six-member committee that combines General Educa tion and Academic Affairs has just recently begun and already the process has become politicized with a n attempt to 'work the referees' to gain a beneficial outcome. I tave a great deal of respect for Carl, so please do not interpret my message as an attackon him personally in any way.

Any comments from Carl spea king solely on his views a bout the merits of critical thinking instruction would have been a ppropriate but marginalizing a nd diminishing the educational value of other programmatic offerings while doing so is wholly inappropriate. I do not understa nd why a person who represents a department that benefits from a specific course (PHIL 100) being required for all undergradua tes would opt to dismiss the meaningful learning outcomes offered by courses from colleag ues/peers at the institution. Computing literacy, information literacy, dimensions of wellness, financial health, intercultural competence, senior-level written communication, and engaged global citizens all hold significant value for the FHSU student experience. Carl's a rg umentation in his document is flawed given the scholarly literature, as discussed below.

Example Argument \#1: "Basic budgeting and cause-and-effect reasoning about money is something that comes maturally, if painfully, with growing up. Our students vary considerably regarding what they already know and what they need to know a bout thinking through their financial options. FHSU can supplement what they a Irea dy know with basic financial advising a nd fire ncial health coaching by expanding services availa ble through the Fischli-Wills Center for Student Success."

Artavanis and Karra (2020) report that in a study of land-grant public university students, about $40 \%$ of students studied exhibited a low level of financial literacy, with a significant number of female, racial/ethnic minority, and first-generation students exhibiting low levels of fina ncial literacy. KBOR's Higher Ed Statistics reports that $62 \%$ of FHSU 's full-time equivalent student body identifies as female and $22 \%$ identify as either Latino/Hispanic, Black/African American, or Asian. As the President of the university writes (being a first-generation student herself), the university serves a sig nificant number of first-generation students and Pell Grant recipients, the latter being a population that qualify for the grant given their extremely bw income.

The student body served at FHSU have demographic characteristics that peer-reviewed research suggests will often lack financial literacy. Why would we eliminate theoption of taking a course on financial literacy within the general education progra $m$ when so many students we serve would benefit from taking a course on financial literacy ifthey choose to do so after consultation from professional advisors a nd faculty mentors? lacking financial literacy hinders the ability to repay debt after graduation, as Artava nis and Karra (2020) report, a nd Lusa rdi (2019) links bw financial literacy to risky and harmful financial behavior. It does not make sense to propose eliminating a course as a noption for general education that will help to prevent calamitous fina ncial situations like the inability to repay student loa n debt. Seemingly brushing off economic peril as a natural part of growing up is remarkably tone deaf for anyone to do. I think we can find common ground in agreeing that given current conditions our university does not have the resources or staff to provide meaningful financial health coaching to so many students on-campus a nd online through the Center for Student Success.

Example Argument \#2: "Information about commonly used computer a pplications is readily availa ble online, a nd students have considerable training prior to college."

Buzzetto-Hollywood et al. (2018) summarize how higher education institutions are met with the challenge of educating students that ack technological readiness and digital literacy. Again, many of the students lacking technological readiness come from demogra phic backgrounds that make up a major part of the university's population. For instance, KBOR reports FHSU in 2022 had a $21 \%$ total headcount of students that were age 35 or older. Ngo-Ye (2014) summarizes the struggles adult learners retuming to complete the ir studies have with computer literacy. Is the suggestion that watching YouTube videos on computing technology will have as sufficient an educational value for students with computing literacy deficiencies as a course ta ught by a professor trained to help students naviga te the usage of computer a pplications? Having computing literacy courses as a general education option in some capacity will be greatly beneficial to students as we transition during a rapidly evolving technological age.

Example Argument \#3: "As for wellnesseducation, it must be admitted that students come to college with quite a bt of it already. FHSU can supplement this by encouraging extracurricular wellness training. "

Wang et al. (2020) ta lk about the obesity epidemic in the U nited States, with the projection being that by 2030 most adults will have the characteristics of being either overweight or obese. Gowet al. (2010) write the tattending college is linked to weight ga in a nd that overweight college students are more at risk of developing obesity as they get older. Sogariet al. (2018) mention several studies finding college is a major period in sha ping future dietary choices. Polacek et al. (2013) find that a personal wellness course not only increased knowledge about persoral wellness but led to higher adoption of personal wellness behaviors. The assumption that extracurricular wellness training a bne will be sufficient is not supported by most existing academic studies. In addition, colleges across the country are seeing a sharp increase in demand for mental health services since the pandemic (Asla nian \& Roth, 2021), with growth in students exhibiting symptoms tied to a nxiety a nd depression (Fruehwirthet al, 2021). Once aga in, the university does not have the resources to provideextracurricular wellnesstraining to on-campus and online students at the necessary scale. Eliminating the option of personal wellness coursework as a part of the general education program would be a terrible message to send to our students.

Example Argument\#4: "As for intercultural competence and engaged global citizens, these are worthy aspirations, but they do not depend on a body of knowledge that requires a standalone course, which is the point at issue."

Carl here contradicts one of his early points that it is the "responsibility of higher education to prepare students for the workplace." Nam and Fry (2010) raise the point that a $21^{\text {st }}$ century education should offer meaningful coursework on intercultural competence and g lobal engagement for students to thrive in future careers within a diversifying society. Intercultural competency and global engagement a re not mere aspirations; they are the foundation of cultural intelligence that students will apply when interacting with others in the years to come. And while Carl may choose to discount it, the 6 hours that we select as a university are institutionally designated areas, so it would make sense to have course offerings a ligned with our mission: "Fort Hays State University provides a ocessible quality education to Kansas, the nation, and the world through an innovative community of teacher-scholars and professionals to develop engaged g bobal citizen-leaders." KBOR itself encourages the 6 hours to account
for "societal issues, local needs, and institutional priorities." Selecting to omit entirely from the general education program courses that are literally designed to directly help advance the mission of the university seems illogical.

## (7) Institutionally Designated /rea 6 Credit Hours

This area provides flexibility for each Kansas public institution to detine requirements to account for societal issues, Iscal needs, and institut onal mriorities (Tntermediate allpebra shall not meet any of the reguirements in this area).

Carl's flawed argumentation is not limited to his discussion of the other areas of the general education program not covered by the KBOR requirements. When speaking a bout a critical thinking course, he frames a required course as necessary beca use critical thinking is a skill that ta kes time to cultivate-
"We need to do something similar for critical thinking, where a single dedicated class can devote an entire semester to teaching students the broad range of skills needed to analyze and evaluate arguments, a nd provide opportunities for them to practice those skills at length."

If critical thinking is such a time intensive skill to develop, then why is the Philosophy department offering PHIL 100 as a three-week (technically nineteen day) course during Intersession, as well as an 8week course during Fall and Spring? I'm trying to wrap my head around the idea that students in nineteen days can cultivate the vital skills in the manner that is described in Carl's document. Ultimately, it ca $n$ lead people to question if allof this is really a bout offering a course thet is a vital need for student success or simply about maximizing one department's SCH

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At a time of significantly declining enrollment, maximizing student choice that a ligns with individual student needs, interests, a nd goak will be key. Also, prompt completion of degrees is a goal of KBOR; limiting the ways in which students ca n complete general education requirements would undermine that goal. Ma ry at the university talka big game about a student-centered experience; let's walk the walk instead and show we have a student-centered experience by giving students some additional degree offlexibility and choice in completing their general education requirements.

PHIL 100 Critical Thinking is a part of the KBOR Transfer Matrix. Taking it will satisfy one of the courses in the Arts and Humanities discipline area. Is there a compelling reason for making it a course required by every single student to take given that it a lready has a home in the KBOR system-wide general education progra m that students can choose to take?

In closing, students should be given choice with the 6 hours, and academic units that worked incredibly hard to develop submissions should not have that work discarded for the benefit of any single department. Please know thet lam writing this message as an individual faculty member concerned about what I have observed. Still, I do feel highly confident that my colleagues in Political Science would encourage general education flexibility to assist with student recruitment a nd degree completion. So many great courses have been developed a nd it would be a shame to throw all these fantastic course offerings in the trash heap to appease one or a few progra ms. Students first, departmental politics last.

Potential scena rio where no category is discarded for the sake of discussion:
Students choose one three-hour course from two of the three areas

## Personal Wellness and Professional

 DevelopmentCombining any course approved under Dimersions of Wellness, Financial Health, a nd Computing Literacy

## Global Citizenship

Combining any course approved under Intercultural Competence and Engaged Global Citizens

## Analytical Thinking

Combining any course approved under Information Literacy and Senior-Level Written Communication \& Critical Thinking [if needed, add the Critical Thinking category as well despite PHIL 100 fulfilling the Arts and Humanities discipline area of KBOR's fra mework]

Thank you all for your time and consideration,
Christopher Olds, Ph.D.

# Appendix F (Reply to the Statement Offered by Dr. Chris Olds): 

## A Reply to the Statement Offered by Dr. Chris Olds From the FHSU Department of Philosophy

Our colleague Chris Olds has offered a lengthy statement in response to the Philosophy Department's "Case for Requiring a Critical Thinking Course in the New General Education Program." It is always good when fellow faculty members devote their time and expertise to gathering data and constructing arguments in support of what they take to be the best interests of our students. There should be far more of this at the university.

That said, and while much in the four-page statement is perfectly true, it is important to see that nothing in it weakens or undermines our case for requiring students to take a critical thinking course. The statement all but ignores the arguments we offered in support of our position.

Four of the points deserve a brief, focused response.

1. The statement criticizes the philosophy department for "politicizing" the process and "working the referees" by submitting our case to the six-member committee. But Provost Arensdorf has actively encouraged individuals and departments to share their views with the committee. And it is never improper for members of the university community to give reasoned arguments in support of policies they think benefit our students. Besides, this is precisely what he is doing himself -- and appropriately so -- making a case for what he believes should be included in the General Education program.
2. The statement appears to be suggesting, in several places, that the philosophy department's proposal to require a critical thinking course was actuated by a desire to "gain a beneficial outcome" for the department, and not, as we explicitly state, by a sincere belief that it is in the best interests of our students. He apparently suspects that the members of the philosophy department are not telling the truth about our motives. That is uncharitable. However, even if it were the case that we were acting purely out of self-interest, this would be completely irrelevant to the truth of our conclusions and the strength of our arguments. Criticizing a person's motives as a way of invalidating their arguments is a textbook example of the ad hominem fallacy.
3. Most of the statement is devoted to proving, by means of numerous scholarly citations, that other courses, such as those being considered to satisfy the computer literacy and personal wellness outcomes, offer valuable content to students. He seems to think we disagree with this. The statement accuses us of "marginalizing and diminishing the educational value of other programmatic offerings." But we never deny the importance of these courses. Indeed, we explicitly acknowledge it in our initial proposal (see "Reply to Objection 3 "). What we have given, however, are reasons why students are better served by requiring a course in critical thinking - very roughly, that these skills are foundational to nearly all academic work, they are exceptionally transferable, and our students are not getting adequate training elsewhere.
4. The statement criticizes us for offering intercession and 8-week critical thinking courses: "If critical thinking is such a time-intensive skill to develop, then why is the Philosophy department offering" these short classes? This is a fair question. The effectiveness of three-week intercession courses at the university is a matter well worth discussing. But for now, the thing to see is that this is at most an argument that the university should not be offering short versions of certain courses. It is not an argument that the university should not require a course in critical thinking.

The statement concludes by noting that the General Education program should align with the university's mission, and that we should put students first. We wholeheartedly agree. Teaching our students to reason well is essential to helping them become the sort of citizen-leaders we all hope they aspire to be. Nothing we do around here more directly serves their best interests.

## Appendix G (Olds Response to Philosophy):

10/19/22

Hello. I am writing in response to the Philosophy Department's follow-up comments.

1. There is no issue with anyone reaching out to committee(s) speaking on the value of a particular course or courses, but that can be done without a ny suggestions that the value of other potential courses in the general education program are less necessary.
2. There is no strength to theargument offered originally by Carl (or Philosophy writ large) that a critical thinking course should be required. We have no clear a nd persuasive evidence from within the institution itself or in the academic literature discussing critical thinking pedagogy thet a single critical thinking course is sufficient. Halpern (1997) suggests that for critical thinking skills to stick, there should be development of learning exercises across the curriculum. Green (2015) writes that sta nd-alone courses in critical thinking offered by a single department a re not sufficient for meeting critical thinking outcomes that prepare students as lifelong lea mers. Zhang et al. (2022) in a study of 2 Chinese universities finds that a sta ndalone critical thinking course did not significantly improve student critical thinking skills but implementing learning modules with critical thinking exercises embedded within courses that cover other substa ntive areas did entance the development of critical thinking skills. I can go on with citations, but there is no definitive indication in the scholarly discussion that a single required critical thinking course instills in students the skills needed for not just future coursework, but for application outside the university setting.
a. PHIL 100 has been offered since 1987 according to Workday. PHIL 100 wasa general education option (not required) before the implementation of the FHSU CORE. Although previously titled General Logic, it essentially has a hways had a predominant emphasis on critical thinking. Despite the massive availa bility of cata, no one has produced one scintilla of evidence that students who ta ke PHIL 100 do significantly better academically on any metric such as GPA, completion of degree on a timely basis, performance in future coursework, etc. Instead, it appea rs that the available information a bout PHIL 100 indicates students are struggling to pass the course and meet a level of performance that would be considered at a proficient level with a final grade of C or higher. Of the $\mathbf{4 1 3 9}$ grades entered for PHIL 100 over the years av ailable in Workday, over one-fifth (21.31\%) were a grade of D or U [see page 3]. In a random selection of just six recent sections of PHIL 100, 37 out of 97 grades entered (a staggering 38.14\%) were a D or U. A significant number of students that take PHIL 100 up to this point are not even meeting proficiency when based on final course grade. An in-depth examination of the factors as to why student success is lacking in PHIL 100 is warranted before even proceeding with discussion that it should be a required course long-term. As a means of compa rison, COMM 100 had only 1022 of 8540 (11.97\%) of grades entered aseither D or U, a lmost a $10 \%$ difference from PHIL 100 [see page 4]. COMM100 is a required course under both the FHSU gen-ed CORE and under the KBOR framework. If we are going to carve out 3 of the 6 available unique institutional hours for one course from one department, there has to be empirical evidence explaining the significant disparity in course performance within that course relative to another required course like COMM 100. Yes, FHSU students are often rough a round the edges in terms of academic ability when starting their studies, but our programmatic offerings are designed such that courses facilitate the ir growth to be mea ningful contributors to
society. I am not confident that a course where $21.3 \%$ of the observable cases earn a D ora U is facilitating growth.
b. A single required course is an overly simplistic solution to a complicated problem. If anything, a multifaceted approach with several departments collaborating and developing critical thinking modules that can be implemented in numerous courses at FHSU, as well as crea ting workshops and activities outside the classroom where students use critical thinking skilk sounds like a more realistic approach to making sure students get frequent and consistent practice honing critical thinking skills.
3. Given the cata and literature discussed a bove, there is no empirical evidence for the statement suggesting students will get adequate critical thinking tra ining from a single sta ndalone course. There is no clear and obvious record of Philosophy colla borating with multiple departments to create activities linking PHIL 100 critical thinking concepts to substantive coursework in other areas. No single department at FHSU can cla im to be the flagbearers for critical thinking and say that no sufficient training is available ekewhere when there is no prolonged work from that single depa itment assisting other departments in developing what they feel would be beneficial critical thinking learning exercises to make sure students are obta ining the stated necessary training. No one academic discipline has a monopoly on critical thinking, so the sibed approach does not seem designed to benefit students.
4. A discussion on whether the university should be offering short forms of certain courses is not necessary. Department units choose to offer a nd submit course offerings, not the university. Note that COMM 100 (oral communication), ENGL 101 (written communication I), and ENG 102 (written communication II) were not offered as three-week courses for Intersession 2022, nor will they be offered in Intersession 2023. Yet PHIL 100 was offered in the nineteen day format Intersession 2022 a nd will be offered in Intersession 2023. In Spring 2023, COMM 100 thas no 8week session either; all sections a re sixteen weeks. A ry department that has a peclagogical view that a skill takes a long time to develop should stand by their convictions, be consistent, a nd not choose to offer the course in an abbreviated format.

I thank the generaleducation and academic affairs committee for their work. I am not trying to politicize to get my most preferred outcome, or the outcome that would most benefit my depa itment. Instead, I merely hope thet future communications to the respective committees do not make a normative judgment that one learning outcome set is better tha $n$ any other without any tangible empirical evidence. Also, I am only suggesting that the committee a llow for students to the ve flexibility to complete the general education sequence under consultation with professional advisors a nd faculty mentors. Imposing a course on students where over one-fifth of the grades a re either a $D$ or $U$ is not going to help in efforts to address the enrollment drop. An $8 \%$ enrollment drop in one semester is not sustainable over multiple terms, and the general education program shouldn't be an additional factor contributing to a ry decline in enrollment.

Thank you,
Christopher Olds

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## Informatics 101

Thomas Friedman wrote an interesting opinion piece in the New York Times entitled "The Two Codes Your Kids Need to Know." (New York Times, February 12, 2019) He noted that the people who administer the SAT college entrance exam determined what skills and knowledge were most important for success in college and in life. They concluded that it was the ability to master computer science and the U. S. Constitution. To shape the world around us and to adapt to that world, we need to know how software works, so computer science is essential. INF101 does not dig deeply into computer science, but it does help students gain skills needed to analyze data (Excel and Access), present the results of data analysis in a meaningful way
(PowerPoint), document research (using APA and MLA Word formatting features), navigate computing in the cloud (OneDrive and Workday), and behave as responsible digital citizens (legal and ethical behaviors). This course is a hands-on course.

The General Education Committee approved this course as part of the CORE with a strong vote of approval because many students do not come with strong spreadsheet, word processing, or database management skills. In a time when we use many different computer applications, one might wonder about the need to learn Microsoft Office in depth. Regardless of what one might think about Microsoft Office, I believe everyone should recognize that Office has established a high standard for competing applications, and it has established the lingua franca for those applications. Everyone uses files with doc, docx, xls, xlsx, ppt, and pptx extensions. More importantly in many settings there is the assumption that you will be able to download files in these formats and know how to produce documents, spreadsheets, and presentations. I believe the General Education Committee recognized the fact that almost everyone in every occupation needs to know the basics of word processing, spreadsheets, database management systems, and presentation software. Even large companies who purchase expensive cloud-based systems like Workday recognize the need for continuing to download or upload data into or from Excel and Word.

This point was driven home to me recently when I was asked to teach some Excel basics to ex-prisoners who lived in a half-way house because they were expected to track their expenses and contributions in Excel. To cite another example, I was asked to teach Excel to a lineman who was transitioning to a management role. Students often tell me that they thought they knew word processing and spreadsheets but quickly realized they had just scratched the surface when they start working through the assignments.

As you will see when looking at the Syllabus, the course requires a lot of work from the students. Students format a research document in APA or MLA format with title page, footnotes, headers, properly formatted headings (three levels), citations, tables with captions, bibliography, table of contents, and an index. They learn how to use pivot tables to analyze and to display data. They use Excel tables to sort and to filter data. They create a student budget, and use the pmt function to see the results of changing interest rates on loans. Because the vlookup function (now xlookup) is often used in accounting and grade calculations, they use it in their assignments. The following are a sampling of other functions used in assignments: frequency (for producing frequency distributions), max, min, average, count, countif, sum, and sumif. They illustrate the results of data analysis by learning when to use multiple types of charts (scatter, histograms, pie, bubble, column, and line) and how to move those charts into PowerPoint. When learning about cloud computing, they learn how to access data in Workday to use that data in their student budgets. They do single and double variable tables to see the effects of increasing interest rates. They learn the basics of a relational database system by learning how to build relationships between tables, creating tables of data, building queries, and doing reports. They enhance presentation skills by creating PowerPoint presentations and narrating them. They demonstrate how to do create custom animations using the screen recording feature (a poor man's Camtasia Relay). They import charts and screens from a variety of on-line applications to improve the content of their presentations. They also learn the ethical uses of content, and the legal and illegal uses of the dark web.

I believe this kind of foundational course is a true General Education course that is useful for nearly all students and majors.

