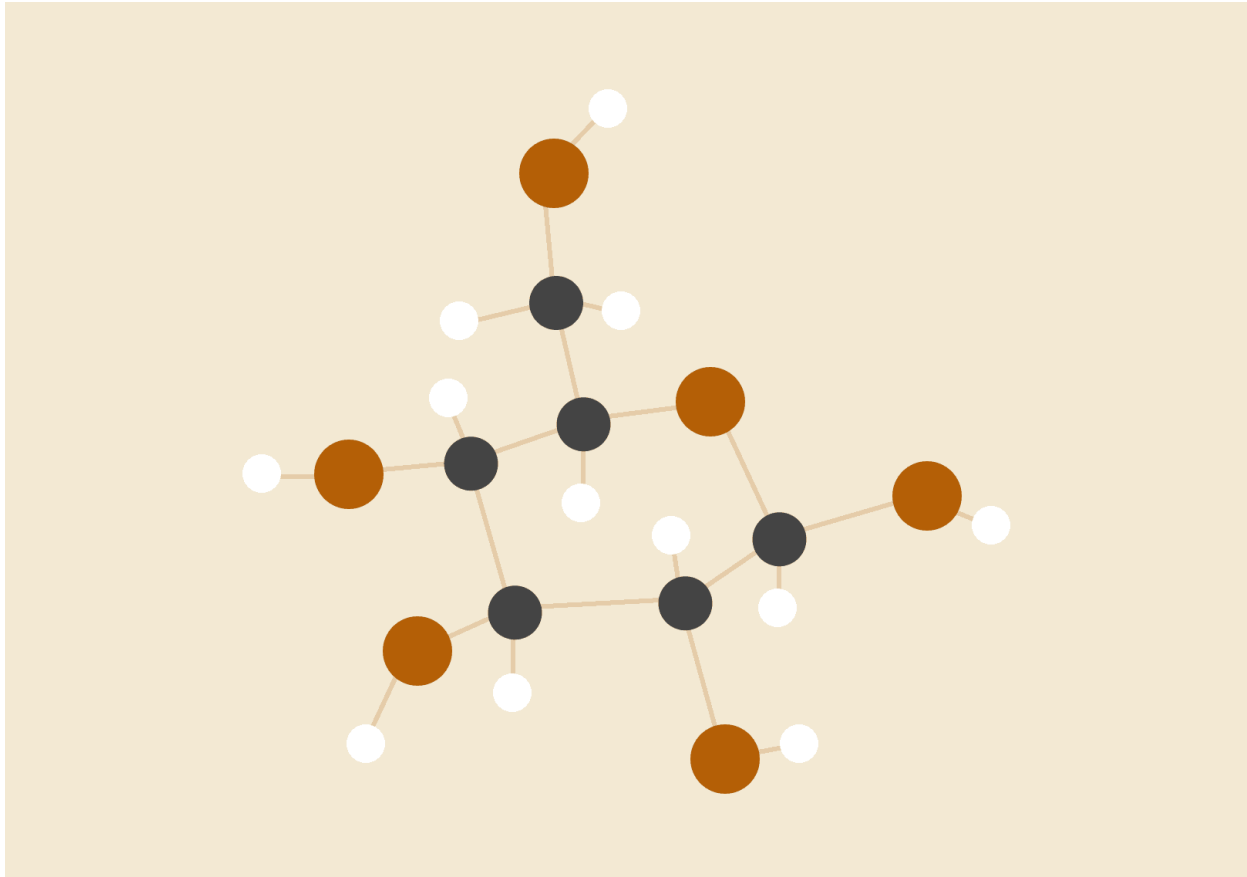


INTEGRATED STUDIES at UVU

A review of senior theses and projects from 2020-2023



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INTRODUCTION

Integrated Studies Program Director Frederick White asked me to complete an external review of undergraduate capstone theses and projects. These capstone projects map to the first two Integrated Studies program learning outcomes: PLO1 : Graduates are able to research and analyze information to develop interdisciplinary projects; PLO2: Graduates can communicate clearly and persuasively in writing and in speech. I was provided with a [selection of theses and projects](#), created a rubric, and assessed the artifacts.

I approach this assignment with relevant experience. I have been a tenure track faculty with the Interdisciplinary Arts and Sciences Department, which houses the Integrated Studies program, at Utah Tech University since 2017 and started teaching for the Integrated Studies program a few semesters before that. I have supervised student capstone theses and projects and have helped develop that curriculum in this area for the department, both for the capstone classes and for the courses that build to this learning experience.

The Rubrics and Comments section of this report includes the completed rubric for each artifact. The Strengths and Weaknesses section collections observations from all of the artifacts, and the final section includes recommendations for improving student outcomes.

RUBRICS AND COMMENTS

THESIS 2020A	Does Not Meet Expectations	Meets Expectations	Exceeds Expectations
Criteria 1: Does the work exhibit interdisciplinary qualities? Does it draw on disciplinary methodologies and ways of knowing to achieve the stated purpose? (PLO 1)	The stated purpose is an exploration of a broad topic, not a research question, which would have helped the student focus their thinking and research, hopefully getting them deeper into the topic. The “this is interdisciplinary” paragraph in the intro really doesn’t communicate anything substantive. By invoking the discipline of history (and of art), the student should have defined the historical periods they were addressing, but chose not to do so.		
Criteria 2: How well is the work written? Does it		The student communicates on a surface level, but does	

communicate clearly? Does it adhere to appropriate style requirements? (PLO 2)		so with ease, giving particular attention to three examples. There is a sense of completeness to the thesis.	
Criteria 3: Does the work draw on good primary and secondary sources? (PLO 1)	I see many primary sources (newspaper articles) but relatively few solid secondary sources and almost no journal articles coming from art criticism, art history, or history		
Criteria 4: In what ways is the work creative, innovative, especially interesting? In what ways might it be lacking? (PLO 1, 2)		The work is innovative and creative because it tries to tie in an example from the student's lived experience to explore an important topic.	
Criteria 5: Does the work exhibit knowledge and skills that will enhance the student's life work, whatever it is? (PLO 1, 2)		I believe so, as one of the examples of street art is relevant to the life of the student and part of what they wanted to understand in taking on this project.	

THESIS 2021A	Does Not Meet Expectations	Meets Expectations	Exceeds Expectations
Criteria 1: Does the work exhibit interdisciplinary qualities? Does it draw on disciplinary methodologies and ways of knowing to achieve the stated purpose? (PLO 1)	Thesis begins with a question but would have liked a heads up as to where the work was going. I don't see any discussion of the two disciplinary emphases and their role in understanding corn. A clearer intro and explanation of frameworks or methods would have given structure to this thesis.		

<p>Criteria 2: How well is the work written? Does it communicate clearly? Does it adhere to appropriate style requirements? (PLO 2)</p>	<p>The structure of this thesis is erratic. Not sure that the etymology section was necessary, nor did the paragraph on foie gras seem necessary to the purpose of the thesis. Lots of quotes expand the text.</p>		
<p>Criteria 3: Does the work draw on good primary and secondary sources? (PLO 1)</p>	<p>Third paragraph contains "citation needed" comment - feels unpolished. One of the sources is a PragerU video. Many more citations were needed than what were offered in the text. Native American voices commenting on the role of corn was missing from discussions of corn and colonization. Over-reliance on Omnivore's Dilemma and not enough peer reviewed articles. Not enough sources articulating analytical frameworks from English or Cinema studies.</p>		
<p>Criteria 4: In what ways is the work creative, innovative, especially interesting? In what ways might it be lacking? (PLO 1, 2)</p>		<p>I think trying to connect corn, colonization, crop circles, and representations of those things in cinema is ambitious and interesting, but the thesis does not set out clear goals that it can achieve. The result is scattered.</p>	
<p>Criteria 5: Does the work exhibit knowledge and skills that will enhance the student's life work, whatever it is? (PLO 1, 2)</p>		<p>Perhaps. It looks like the student was trying to combine a number of interests and angles with regard to corn.</p>	

THESIS 2021B	Does Not Meet Expectations	Meets Expectations	Exceeds Expectations
Criteria 1: Does the work exhibit interdisciplinary qualities? Does it draw on disciplinary methodologies and ways of knowing to achieve the stated purpose? (PLO 1)			Yes, the thesis draws on methods and frameworks from political science and history in ways that are explicit and handled in a sophisticated way.
Criteria 2: How well is the work written? Does it communicate clearly? Does it adhere to appropriate style requirements? (PLO 2)			Well written, well organized and articulated, solid argument, well supported through citations. I would have liked to have seen a thematic approach to the lit review instead of a series of sequential summaries of the secondary literature, but I'm guessing that this was not taught (though current practice in most fields).
Criteria 3: Does the work draw on good primary and secondary sources? (PLO 1)			Great use of primary and secondary sources from a number of government/research center websites and journal articles, well-cited.
Criteria 4: In what ways is the work creative, innovative, especially interesting? In what ways might it be lacking? (PLO 1, 2)			This is an unusual topic for an undergraduate student in Utah, but the student communicated passion and interest for understanding the topic in great depth. The depth and the sophisticated writing about the topic are unusual in undergraduate work.
Criteria 5: Does the work exhibit knowledge and			Certainly. The thesis exhibits a passion for an

skills that will enhance the student's life work, whatever it is? (PLO 1, 2)			under-studied area of the world and a clear interest in the details of the topic and its policy and economic implications. This looks like a launching point for further work on the topic.
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THESIS 2021C	Does Not Meet Expectations	Meets Expectations	Exceeds Expectations
Criteria 1: Does the work exhibit interdisciplinary qualities? Does it draw on disciplinary methodologies and ways of knowing to achieve the stated purpose? (PLO 1)		Yes, but the author does not name interdisciplinarity in any way and does not outline in the intro where this study will be going or what its methods or frameworks will be, but does draw on interdisciplinary methods (knowingly or unknowingly) and uses a research question to structure the thesis.	
Criteria 2: How well is the work written? Does it communicate clearly? Does it adhere to appropriate style requirements? (PLO 2)	There are places where the author has used bullet points instead of explaining and analyzing his source material in prose. Inconsistent formatting of headers is confusing. Tone is conversational, which is fine, but is lacking in the conventions of academic writing.		
Criteria 3: Does the work draw on good primary and secondary sources? (PLO 1)	Not sure what citation style this author is using, as it seems inconsistent and poorly applied. I see very few (if any?) peer reviewed journal articles, but lots of random		

	websites and news articles.		
Criteria 4: In what ways is the work creative, innovative, especially interesting? In what ways might it be lacking? (PLO 1, 2)		I do get the sense that the author is passionate about this topic, but also that they struggle to find and analyze good information about the topic, which would allow the project to carry more weight.	
Criteria 5: Does the work exhibit knowledge and skills that will enhance the student's life work, whatever it is? (PLO 1, 2)		Yes, I believe that this project and the connections the author has made to others working in golf course management will be of use to the author in the future. This project has given the author the opportunity to explore surface level writing on the topic and is familiar with some of the relevant issues.	

THESIS 2022A	Does Not Meet Expectations	Meets Expectations	Exceeds Expectations
Criteria 1: Does the work exhibit interdisciplinary qualities? Does it draw on disciplinary methodologies and ways of knowing to achieve the stated purpose? (PLO 1)		Yes, the author identifies the different disciplines being used in the intro, but does not include a research question or offer a methodology. It does seem like the author bit off a bit more than they could reasonably chew.	
Criteria 2: How well is the work written? Does it communicate clearly? Does it adhere to appropriate style requirements? (PLO 2)		The thesis is well-written and succeeds in communicating clearly. The work is well-cited. There are still a few places with bullet points that should really be	

		continuous prose.	
Criteria 3: Does the work draw on good primary and secondary sources? (PLO 1)		This student makes use of more peer-reviewed journal articles than many other students, but still includes a lot of random websites, youtube videos, and even Wikipedia in the list of works cited.	
Criteria 4: In what ways is the work creative, innovative, especially interesting? In what ways might it be lacking? (PLO 1, 2)		I think that the student is trying to plumb the depths of a difficult and theoretical topic - this is interesting. I think that the student is trying to do too many things in this project, which makes it hard for them to focus on understanding and explaining the central concept well.	
Criteria 5: Does the work exhibit knowledge and skills that will enhance the student's life work, whatever it is? (PLO 1, 2)			I think that the student will benefit from this deeper dive.

THESIS 2022B	Does Not Meet Expectations	Meets Expectations	Exceeds Expectations
Criteria 1: Does the work exhibit interdisciplinary qualities? Does it draw on disciplinary methodologies and ways of knowing to achieve the stated purpose? (PLO 1)	It does, but it does not state what methods/tools of each discipline are being used. I would like to see somewhere in the intro where the approach to this topic is articulated clearly.		
Criteria 2: How well is the work written? Does it communicate clearly? Does it adhere to		The writing is clear and thoughtful, though thin on citations.	

appropriate style requirements? (PLO 2)			
Criteria 3: Does the work draw on good primary and secondary sources? (PLO 1)	This thesis uses some news articles and books, but includes almost no peer-reviewed journal articles. This thesis uses far fewer sources than the other theses.		
Criteria 4: In what ways is the work creative, innovative, especially interesting? In what ways might it be lacking? (PLO 1, 2)		The work is trying to harness a contemporary movement that straddles gender studies and criminology, but lacks depth, which could have been improved through better sources.	
Criteria 5: Does the work exhibit knowledge and skills that will enhance the student's life work, whatever it is? (PLO 1, 2)		Yes, I think that the student will benefit from exploring this topic, even if that exploration lacks depth.	

THESIS 2023A	Does Not Meet Expectations	Meets Expectations	Exceeds Expectations
Criteria 1: Does the work exhibit interdisciplinary qualities? Does it draw on disciplinary methodologies and ways of knowing to achieve the stated purpose? (PLO 1)			I would have loved to have seen a short section/paragraph on the interdisciplinarity of this project, though the student does explain the relationship between the light and its impacts on biology.
Criteria 2: How well is the work written? Does it communicate clearly? Does it adhere to appropriate style requirements? (PLO 2)			Student uses explanations and citations to communicate with authority about the topic and to contextualize the results.

Criteria 3: Does the work draw on good primary and secondary sources? (PLO 1)			Student used a number of peer reviewed journal articles, together with other sources.
Criteria 4: In what ways is the work creative, innovative, especially interesting? In what ways might it be lacking? (PLO 1, 2)			The student designed and executed a real research project and this thesis is a reflection of that research.
Criteria 5: Does the work exhibit knowledge and skills that will enhance the student's life work, whatever it is? (PLO 1, 2)			Yes. I believe that this thesis experience will be a foundation for the student to build on for future research.

THESIS 2023B	Does Not Meet Expectations	Meets Expectations	Exceeds Expectations
Criteria 1: Does the work exhibit interdisciplinary qualities? Does it draw on disciplinary methodologies and ways of knowing to achieve the stated purpose? (PLO 1)			Student identifies disciplinary tools and methods for this project. I would have loved to have seen a research question help guide the discussion of the findings.
Criteria 2: How well is the work written? Does it communicate clearly? Does it adhere to appropriate style requirements? (PLO 2)		Yes, the writing is clear and thoughtful, but does not include enough citations and connect the findings of this study to the broader scholarship. This is a big weakness.	
Criteria 3: Does the work draw on good primary and secondary sources? (PLO 1)		GREAT use of primary sources and telling the women's stories. The study does not include nearly enough secondary work - and there are many many	

		peer reviewed academic journal articles on this topic.	
Criteria 4: In what ways is the work creative, innovative, especially interesting? In what ways might it be lacking? (PLO 1, 2)		I like the student's willingness to collect stories through interviews. This falls short, though, because the student did not connect the themes to broader academic discussion around these themes.	
Criteria 5: Does the work exhibit knowledge and skills that will enhance the student's life work, whatever it is? (PLO 1, 2)			Yes, the student executed their own study from interviews and attempted to write that up. This experience is something for the student to build on in the future.

PROJECT 2020A	Does Not Meet Expectations	Meets Expectations	Exceeds Expectations
Criteria 1: Does the work exhibit interdisciplinary qualities? Does it draw on disciplinary methodologies and ways of knowing to achieve the stated purpose? (PLO 1)		The author is not explicit about the disciplinary knowledge and methodologies, but she is specifically using the framework of memoir and the work of a particular anthropologist.	
Criteria 2: How well is the work written? Does it communicate clearly? Does it adhere to appropriate style requirements? (PLO 2)			This project has a strong narrative element that blends personal story with academic insight in a way that is compelling.
Criteria 3: Does the work draw on good primary and secondary sources? (PLO 1)		Yes. I still would have liked to have seen the author reference a few more peer-reviewed journal articles.	

Criteria 4: In what ways is the work creative, innovative, especially interesting? In what ways might it be lacking? (PLO 1, 2)			I think that this is a good reflection on the complexity of the experience of adoption, particularly from the point of view of a sibling.
Criteria 5: Does the work exhibit knowledge and skills that will enhance the student's life work, whatever it is? (PLO 1, 2)			Yes, I imagine that working through this project has helped the author better understand her family relationships and dynamics. She has also read a bit of the literature on adoption and so she has an understanding of how her personal situation reflects larger stories about adoption.

PROJECT 2020B	Does Not Meet Expectations	Meets Expectations	Exceeds Expectations
Criteria 1: Does the work exhibit interdisciplinary qualities? Does it draw on disciplinary methodologies and ways of knowing to achieve the stated purpose? (PLO 1)	As the author's two emphases are English and Psychology, I would have liked to have seen at least minimal engagement with some of the secondary literature in that discipline, especially as 12 step programs are not evidence-based. The author assumes that 12 steps is rooted in psychological research, but that is not correct.		
Criteria 2: How well is the work written? Does it communicate clearly? Does it adhere to appropriate style requirements? (PLO 2)		The writer communicates clearly and in detail about her experience. There are no citations - just a few NA, AA, and 12 step links. Still, this is a vulnerable and courageous story that the author shares.	

<p>Criteria 3: Does the work draw on good primary and secondary sources? (PLO 1)</p>		<p>This is a deep reflection on the author's personal experience, but there are no works cited, other than the AA 12 step program. The author claims that research has found 12 step programs to be absolutely effective, but does not reference any literature to support this, leaving personal experience as a stand in for doing the reading and engaging 12 steps uncritically.</p>	
<p>Criteria 4: In what ways is the work creative, innovative, especially interesting? In what ways might it be lacking? (PLO 1, 2)</p>			<p>I think that the author telling the story through the 12 steps is a strong creative choice. I think that engaging research at some points in this narrative could have strengthened that choice and allowed the author to be even a little bit critical about 12 step programs.</p>
<p>Criteria 5: Does the work exhibit knowledge and skills that will enhance the student's life work, whatever it is? (PLO 1, 2)</p>			<p>I do think that the author will benefit from writing this lengthy piece of reflective life writing.</p>

PROJECT 2021A	Does Not Meet Expectations	Meets Expectations	Exceeds Expectations
<p>Criteria 1: Does the work exhibit interdisciplinary qualities? Does it draw on disciplinary methodologies and ways of knowing to achieve the stated purpose? (PLO 1)</p>	<p>I would like to have seen an explicit statement or naming of Indigenous Studies and Peace and Justice Studies somewhere in the text. I do not see any engagement with the secondary literature in those areas.</p>		

<p>Criteria 2: How well is the work written? Does it communicate clearly? Does it adhere to appropriate style requirements? (PLO 2)</p>		<p>This is a narrative about working with a nonprofit. Article IV is blank, but the bylaws appear as bylaws.</p>	
<p>Criteria 3: Does the work draw on good primary and secondary sources? (PLO 1)</p>		<p>This is largely personal narrative without a discussion of how the bylaws came about, how it was determined what was needed, what served as the model. There is no discussion of secondary sources. I'm sure that the work draws on good sources. I wish that the author had shared those with the reader.</p>	
<p>Criteria 4: In what ways is the work creative, innovative, especially interesting? In what ways might it be lacking? (PLO 1, 2)</p>		<p>This is a nice example of an applied project - creating a piece of text (bylaws) that help sustain good governance. I wish that the author had made more of a connection between good governance principles in the bylaws and peace and justice studies.</p>	
<p>Criteria 5: Does the work exhibit knowledge and skills that will enhance the student's life work, whatever it is? (PLO 1, 2)</p>			<p>There is a lot of experience here for the author to draw on in future work and interviews. I can see the author using this experience to step into policy making or further NGO/NPO work.</p>
<p>PROJECT 2021B</p>	<p>Does Not Meet Expectations</p>	<p>Meets Expectations</p>	<p>Exceeds Expectations</p>

Criteria 1: Does the work exhibit interdisciplinary qualities? Does it draw on disciplinary methodologies and ways of knowing to achieve the stated purpose? (PLO 1)		It does, as it recognizes a community health need with a solution from business.	
Criteria 2: How well is the work written? Does it communicate clearly? Does it adhere to appropriate style requirements? (PLO 2)		The author does a good job of communicating clearly, but the plan would have a little more authority by invoking the secondary literature on this topic.	
Criteria 3: Does the work draw on good primary and secondary sources? (PLO 1)	There is extensive academic literature on non-emergent medical transportation and I'm not sure why the author references none of it.		
Criteria 4: In what ways is the work creative, innovative, especially interesting? In what ways might it be lacking? (PLO 1, 2)			A business plan is a creative use of the capstone experience to help the student make plans and set goals for the future specifically related to the student's areas of interest.
Criteria 5: Does the work exhibit knowledge and skills that will enhance the student's life work, whatever it is? (PLO 1, 2)			Yes, I think that the student is setting themselves up for success in the future by creating this plan.

PROJECT 2022A	Does Not Meet Expectations	Meets Expectations	Exceeds Expectations
Criteria 1: Does the work exhibit interdisciplinary qualities? Does it draw on disciplinary methodologies and ways	I do not know what the student's Integrated Studies emphasis areas are - they are not stated and the student never		

of knowing to achieve the stated purpose? (PLO 1)	identifies them. No research question.		
Criteria 2: How well is the work written? Does it communicate clearly? Does it adhere to appropriate style requirements? (PLO 2)	Student sometimes writes in bullet points, which should be prose. The student includes many data visualizations, but it is unclear if the student made those or is borrowing them from other sources. There isn't robust discussion of these data visualizations or how they provide info to the city of Palm Springs or other entities to make decisions around the Coachella festival. The appendices seem to be fleshing out the page count.		
Criteria 3: Does the work draw on good primary and secondary sources? (PLO 1)	There are peer-reviewed journal articles on this topic and there are no peer-reviewed journal articles in the references section.		
Criteria 4: In what ways is the work creative, innovative, especially interesting? In what ways might it be lacking? (PLO 1, 2)			I think that the student is trying to understand a solid real-world problem and found a dataset with which they can create visualizations. Still, the student does not articulate a research question that would help focus the writing and structure, nor does the student examine any of the existing scholarly literature on the subject, favoring news sources instead.

<p>Criteria 5: Does the work exhibit knowledge and skills that will enhance the student's life work, whatever it is? (PLO 1, 2)</p>			<p>I imagine that this is a useful exercise for someone who is looking at business management related to large events and their impact on communities. The student has tried to understand a specific piece of the problem and will likely benefit from the knowledge gained and the methods employed, though I wish that they had given those pieces more explanation and discussion.</p>
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PROJECT 2023A	Does Not Meet Expectations	Meets Expectations	Exceeds Expectations
<p>Criteria 1: Does the work exhibit interdisciplinary qualities? Does it draw on disciplinary methodologies and ways of knowing to achieve the stated purpose? (PLO 1)</p>		<p>The student articulates the disciplines and what they mean in the context of this business plan.</p>	
<p>Criteria 2: How well is the work written? Does it communicate clearly? Does it adhere to appropriate style requirements? (PLO 2)</p>	<p>I would have like to have seen more prose/explanation about what the project is. I think a solid business plan would do more summary/descriptive work.</p>		
<p>Criteria 3: Does the work draw on good primary and secondary sources? (PLO 1)</p>	<p>I do not see any sources referenced.</p>		
<p>Criteria 4: In what ways is the work creative, innovative, especially interesting? In what ways</p>			<p>I see the student trying to create something valuable out of their educational experiences.</p>

might it be lacking? (PLO 1, 2)			
Criteria 5: Does the work exhibit knowledge and skills that will enhance the student's life work, whatever it is? (PLO 1, 2)			I imagine that the student will gain tremendous real world experience by putting this plan into action, regardless if it fails or succeeds. The student still needs more pieces to this plan, but some of the basics are in place.

PROJECT 2023B	Does Not Meet Expectations	Meets Expectations	Exceeds Expectations
Criteria 1: Does the work exhibit interdisciplinary qualities? Does it draw on disciplinary methodologies and ways of knowing to achieve the stated purpose? (PLO 1)	The author does not identify areas of emphasis, connect them to their tools, frameworks, or methods in the narrative.		
Criteria 2: How well is the work written? Does it communicate clearly? Does it adhere to appropriate style requirements? (PLO 2)		The narrative format works well for this project. There is a lot of additional data given, together with event materials and photos of the event. Still, the project lacks citations and engagement with existing frameworks, best practices, or information.	
Criteria 3: Does the work draw on good primary and secondary sources? (PLO 1)		The narrative reflects on the primary sources (items related to the event) but there is no engagement with secondary literature at all.	
Criteria 4: In what ways is the work creative, innovative, especially interesting? In what ways			The narrative with event artifacts and planning documents is creative and reflective in ways that are

might it be lacking? (PLO 1, 2)			interesting and compelling.
Criteria 5: Does the work exhibit knowledge and skills that will enhance the student's life work, whatever it is? (PLO 1, 2)			The student indicates in a specific section what they learned by working on this project. I imagine that this will inform the student's future work in this area.

STRENGTHS AND WEAKNESSES

Many of the projects and theses excelled at innovation and creativity. The overwhelming majority of projects and theses clearly stemmed from students' personal interests and were trying to address real world problems and situations. It is easy to imagine many of the students are using their capstone thesis or project to get an entry-level job in their chosen field. Regardless of a particular thesis or project's success in the stated aims, students had the valuable opportunity to choose an area for study or applied work and nearly all made use of that opportunity to some degree.

As a group, though, they did not demonstrate university-level skills in information literacy, which should have been learned in general education courses and built on in upper-division courses. The Association of American Colleges and Universities has identified [information literacy](#) as one of the core values of American liberal education. As students were largely not using peer-reviewed academic sources, their analysis and ability to learn from their sources was limited. Many artifacts used news articles and assorted websites that were not going to be deep sources of information, analysis, and learning. Students were mostly not putting their sources in dialogue with each other and were therefore not reproducing academic discourse about their areas of study.

To reiterate, the two program learning outcomes being assessed in this exercise are: PLO1 : Graduates are able to research and analyze information to develop interdisciplinary projects; PLO2: Graduates can communicate clearly and persuasively in writing and in speech. Broadly speaking, the artifacts presented to me meet these PLOs. Still, research, analysis, and clear and persuasive writing, even at the undergraduate level, need to make a connection to existing expertise in research. For a number of the student authors of these artifacts, they were not able to clearly and persuasively make that connection, nor demonstrate that they could identify and then use the tools of their different disciplines in addressing a problem or topic of their choosing. I would not expect all undergraduate capstone projects to do this well, but I would expect all passing capstone projects to do this on some level, even poorly. Closing the information literacy gap through instruction and mentorship will improve learning outcomes for students and equip them to do further research and professional work in other settings.

RECOMMENDATIONS FOR THE FUTURE

1. Information literacy instruction. Students need specific instruction on the need to include peer-reviewed sources and how to find and evaluate such sources (information literacy skills). While not all of the sources for such theses and projects need to be peer-reviewed academic journal articles, each of these theses and projects would benefit from incorporating more peer reviewed work into their theses and projects.
2. Clear instruction on the number of peer-reviewed journal articles that theses and projects should reference.

This stands out as a gap that can be filled through instruction and ongoing guidance/mentorship throughout the writing process.

3. Clear instruction on communicating about interdisciplinary work. Some of the best thesis and project introductions identified and commented on the skills and knowledge from each of their disciplines, but most did not. I would like to see something in the intro about the disciplinary knowledge and skills that the student is using to address their topic/research question. This could be part of the instructions to students.
4. Encourage use of research questions. Many students chose a topic for their thesis but did not have a stated research question. Some of the projects did not have a clearly stated purpose or summary. This hindered students' ability to stay focused and, as PLO2 aims for, "communicate clearly and persuasively in writing."