

CAFNRM has been frequently engaged with measuring students' performance since the inception of the annual assessment of WASC Core Competencies in 2012-2013.

a. COURSE: HORT 450 (WRITTEN COMMUNICATION, AY 2013-2014)

ASSIGNMENT: Students will produce a science report that must include all the proper parts of a scientific journal article: introduction, literature review, results & discussions, conclusion and citations in a 15 to 20-page research paper.

DATA (MEASUREMENT OF THE COMPETENCY): Sixteen papers (n = 16) were read by the Assessment Committee. Of the sixteen, 10 of 16 (or 62%) exhibited skill above "competent" (score of "3"), with only one paper receiving a score of less than "emerging." While the assignment was not included with the papers, the papers themselves uniformly communicated the expectations for the writing assignment. The Committee felt that the overall quality of the papers exhibited college-level research of writing, especially in terms of scientific method, data description, and analysis.

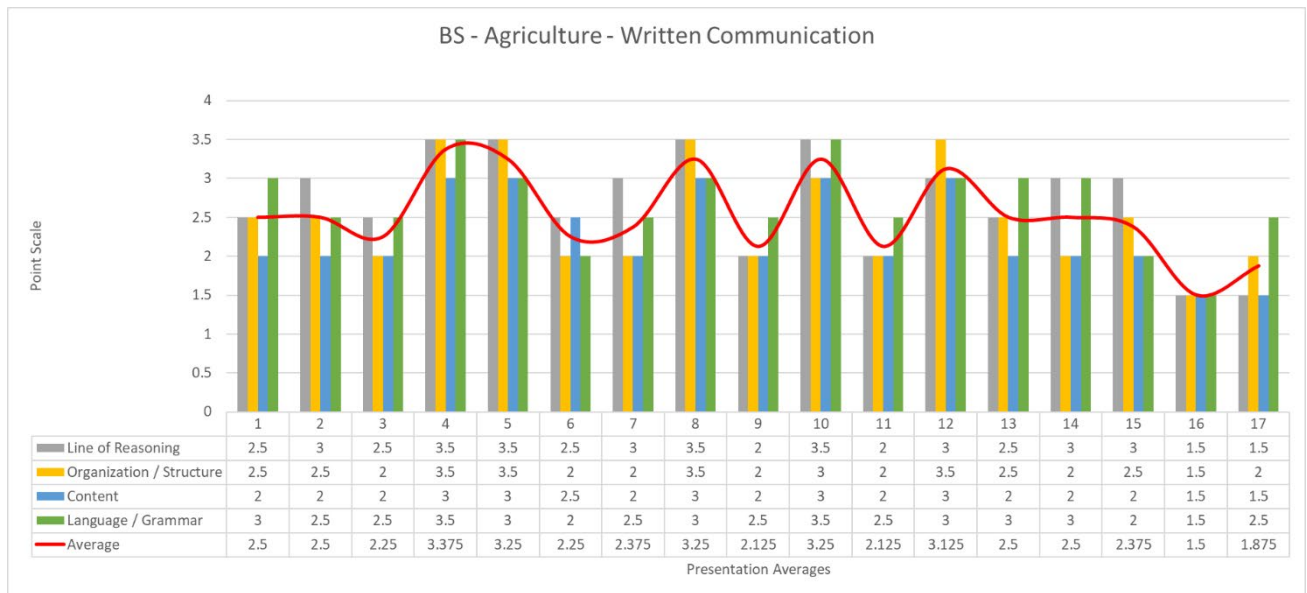
	Line of Reasoning	Org/Structure	Content	Language/Grammar	Average
Paper 1	Reader 1	4	4	4	4
	Reader 2	3	3	3	3
		3.5	3.5	3.5	3.5
Paper 2	Reader 1	3	3	2	3
	Reader 2	3	3	2	3
		3	2	2	3
Paper 3	Reader 1	3	3	3	3
	Reader 2	4	3	3	3
		3.5	3	3	3
Paper 4	Reader 1	2	2	2	1
	Reader 2	2	2	2	2
		2	2	2	1.5
Paper 5	Reader 1	3	3	3	3
	Reader 2	4	3	3	3
		3.5	3	3	3
Paper 6	Reader 1	4	3	4	3
	Reader 2	4	3	4	3

		4	3	4	3
Paper 7	Reader 1	2	1	3	3
	Reader 2	3	2	2	3
		2.5	1.5	2.5	3
Paper 8	Reader 1	4	4	3	4
	Reader 2	4	3	3	3
		4	3.5	3	3.5
Paper 9	Reader 1	3	2	3	2
	Reader 2	3	2	3	2
		3	2	3	2
Paper 10	Reader 1	4	3	3	3
	Reader 2	4	3	4	4
		4	3	3.5	3.5
Paper 11	Reader 1	3	3	3	3
	Reader 2	3	3	3	3
		3	3	3	3
Paper 12	Reader 1	3	3	3	2
	Reader 2	3	2	2	3
		3	2.5	2.5	3
Paper 13	Reader 1	2	2	2	2
	Reader 2	2	2	2	2
		2	2	2	2
Paper 14	Reader 1	3	3	3	3
	Reader 2	4	4	3	3
		3.5	3.5	3	3
Paper 15	Reader 1	4	4	3	4
	Reader 2	4	4	3	4
		4	4	3	4
Paper 16	Reader 1	4	3	4	3
	Reader 2	3	3	3	3
		3.5	3	3.5	3
AVERAGE		3.25	2.78	2.9	2.93

ACTION TAKEN IN RESPONSE TO DATA (CLOSING THE LOOP): The College has reviewed the data and will initiate the following: (1) to improve the structure of the paper we will require students to prepare outlines before writing the reports, (2) provide examples of well-structured scientific reports, and (3) to improve content and grammar the reading of exemplary scientific articles will be required and peer review will be required as part of the revision process.

- b. COURSE: HORT 481 (WRITTEN COMMUNICATION, AY 2017-2018)  
 ASSIGNMENT: Student Report of weeding project  
 DATA (MEASUREMENT OF THE COMPETENCY): See graph below

Overall averages for the papers were: Line of Reasoning (2.70), Organization/Structure (2.50), Content (2.26) and Language/Grammar (2.67).



**COMPARE TO #1**

ACTION TAKEN IN RESPONSE TO DATA (CLOSING THE LOOP): Project report will include submission of at least 3 drafts and a final manuscript to give a chance for students in development and improvement of their projects:

- 1st draft: Project proposal including review of literature, objectives and Methodology
  - 2nd draft: all components of 1st draft plus results and discussion
  - 3rd draft: Revision based on editorial comments of 2nd draft
- c. COURSE: ANSC 321 (ORAL COMMUNICATION, AY 2016-2017)  
ASSIGNMENT: Timed presentation is 12 minutes, per students on topic assigned. A paper and copy of PPT presentation are submitted to the instructor.

DATA (MEASUREMENT OF THE COMPETENCY): Four ( $n = 4$ ) presentations were assessed by two evaluators, and while scores were relatively good for all students, interrater reliability was poor at around 30%. Class average scores of the four categories from the two external evaluators are:

Organization and structure: 3.5  
Content: 3.375  
Language: 3.75  
Delivery: 3.75

(3= competent; 4= advanced)

ACTION TAKEN IN RESPONSE TO DATA (CLOSING THE LOOP): Students performed above competent levels in all four categories evaluated. For the purpose of continuous improvement, the instructor will emphasize the ways to enhance the effectiveness of presenting scientific findings.

- d. COURSE: ANSC 321 & SOIL 304 (DIVERSITY & MULTICULTURALISM, AY 2019-2020)  
ASSIGNMENT: Survey  
DATA (MEASUREMENT OF COMPETENCY):

### **ANIMAL SCIENCE 321**

Of the 5 students who completed the survey, one is a sophomore, two are juniors and two, seniors. Broadly speaking, there was general satisfaction with their courses, although none chose to comment specifically on this course or name any other course in their major.

As for responding to the GCC/HPP portion, more emphasis needs to be placed on not only its place in UHH's mission, but also which courses are involved. Those who responded to the GCC/HPP section, regardless of listing other courses, also mostly commented on their Hawaiian Studies courses in particular. Their responses to the last section, however, demands serious scrutiny, especially in terms of the campus stated mission for "collaborative goals and civic participation."

## GCC/HPP

Several students were often unaware of what constitutes a GDD/HPP course and/or which one they had taken. As an example, they might fail to list courses which do constitute GDD/HPP courses and then follow up with their evaluations of specific courses. Their responses to their experiences with Hawaiian Studies courses in particular were very positive.

- Hawaiian Studies taught history & made it fun & interesting to learn about Hawaii.
- A senior from California had effusive praise for HWST 111 and 213: We also learned how to respect each other and those around us. And with that, brought self growth and a different perspective on who I am and where I belong as a student in Hawaii and as a person in general. These two classes really helped me appreciate having the opportunity to go to school in Hawaii and learn about the rich culture traditionally.
- One student praised Hawaiian classes for their lessons in history. The sole less than positive response, however, related to the sense of self: [P]rofessors taught about Hawaiian culture but it was never related back to myself b/c I was only learning about traditional Hawaiian practices.

## Major

Responses varied but as a whole students commented positively about their majors and courses without noting specific courses including this course.

- [sense of place] Animal science classes relate a lot of real life situations to Hawaii (i.e.Hawaii plants, animals, etc.) ...[sense of humanity] science classes only stick to textbook material...[sense of others] classes never teach about other people so it never seemed important to me... [sense of self] I only learn about animals it's never come back individually to me.
- Student from the mainland: I also got to experience a demographic change from mainland scientist [sic]....local people and professors who were born and raised in Hawaii. It has been nice seeing how they appreciate the land and the livestock they care for...this definitely showed diversity within the campus community alone.
- While this student gave high ratings in general regarding the major: [I] think for the pre-vet major more could be taught about Hawaii's indigenous animals and wildlife...I think that in courses we should learn more about ways to be more sustainable in Hawaii regarding foods and services.

## Other

- Pre-vet club and housing does nothing to promote diversity.
- I believe most of the groups are pretty independent from each other and have not done their part trying to encourage...students to be involved.
- I live in Hale Alahonua for two years now... However, I don't attend any events or activities.

- I have attended advising for course scheduling...I find that professors [sic] in your major's department are very helpful and knowledgeable [sic]....I didn't find the freshmen mandatory [sic] advising useful for courses because of lack of knowledge to my major---it would have been easier to have been referred [sic] to a professor [sic] in my department for that.
- There could be more talk about Hawaiian indigenous rights – Maunakea & its impact & importance to Hawaii [sense of place].
- I think more could be done for the LGBTQ community. I heard they were either losing funding or a room.

### SOIL SCIENCE 304

There is 1 sophomore transfer student, 1 junior exchange student, 6 juniors and 3 seniors who completed this survey. Their comments reflect their general satisfaction with their courses and major.

### GCC/HPP

Similar to the comments for Animal Science, several students were confused as to what constituted GCC/HPP courses. More focus also needs to be made as to the mission of General Education, including HPP, or at least that those courses are not considered just fulfilling graduation requirements. Comments would then reflect cross-cultural and intercultural learning.

- Part Hawaiian student from the mainland: With the required courses in Hawaiian history it did shine light to things I had never known about my ethnicity [sense of place]....In the past year via news & media I have learned that there is a strong sense of community here and it welcomes/welcomed from other groups/backgrounds [sense of others]...yeah, pretty cool feelings [sense of self].
- Linguistics 102, Anthropology 205, Anthropology 320: These classes helped me connect with my sense of humanity [sic]. Looking at all the different cultures and races. And sense of others.
- My HPP/GCC classes [listed Hawaiian Ethnobotany and Hawaiian Geography, a course at HAWCC] gave me a greater understanding of Hawaii as a mainlander. While I don't always agree with or fully understand cultural norms here. I learned how to accept and respect them. The classes gave an insight into what would of been hard to figure out on my own.

### Major

- My soil science class has helped me with [sense of place] by learning about how Hawai'i uses its unique soils and resources. Also [sense of humanity] by learning about the different agricultural methods shared and learned with other parts of the world. And

[sense of self] because it has helped me realize how much I do not know and how genius many other cultures are.

- Mixing other cultural methods is cool [sense of humanity]
- Environmental science has connected me to all of my senses because I use them to better understand my classes and all the information from all of them.
- Being born and raised in Hawaii, home will always be the center of what I do. Having Geography/Environmental Studies be my major has helped me have a stronger understanding and appreciation of my home. It has also motivated me to be in the force to restoring and upkeeping Hawaii.
- My major has helped me understand agriculture from other areas and how to integrate them. Everything from lowland taro patches to how to manage weeds from other cultural practices.
- Definitely sense of place & sense of self [Not sense of humanity & sense of others].
- Understanding the scientific portion of the island dealt with agriculture [sense of place]...
- Implying what was learnt from previous courses [sense of humanity]....ideas, where they are developed and the cause [sense of others]...what I am and what I was born to do lead [sic] me to study agricultures, surprisingly learnt a lot [sense of self].
- By learning about Hawai'i's history, environment, & some current social issues, I am always learning & understanding more about our diversity [sense of humanity]....I am an environmental science major in the geography department. All of my geography classes focused on human/social aspects of Hawai'i. I am always astounded at Hawai'i's history & the cultures that make up Hawai'i [sense of others]....My understanding of myself is through the interactions of all the multicultural ethnicities at UH Hilo [sense of self].
- My major is great. Everyone is nice & open. The Ag Club is a pretty small program in which everyone seems to know and get along with each other.

#### Other

- SO GREAT! I am an exchange student and our advisor, Holly, helped so much with teaching about Hawaii, places to go around the island/Hilo, and many social norms, sayings, and values.
- Not participating – I work too much
- Samoan student doesn't list activities but notes the following: "Allowed me to understand how the place or island revolves around culture along with a variety of other races [sense of place]...imply how the culture came be the same as here's [sense of humanity]...development of clubs and activities to assist us in what needed to be done [sense of others]...identify or see what interests I might get out of learning or participation (sense of self)."
- The services were helpful towards academia....I am proud to attend UH Hilo & to work in geography in Hawaii because of my experience here.
- Nothing, housing just helps supply a roof over my head

- Advising was the only thing that I can recall using in my years here at UH Hilo. They were excellent.

Only one student had a positive comment about campus housing. Like the observations offered in the survey completed by the students in Animal Science 321, much more needs to also be done regarding campus and community engagement.

These assessments are all posted on the University’s accreditation website:

<https://hilo.hawaii.edu/blog/accreditation/b-s-agriculture-animal-science-livestock-production-specialty-ieei/>

a. WI ASSESSMENT: HORT 262 and AG 263 (AY 2019-2020)

ASSIGNMENT: Student journals

DATA (MEASUREMENT OF COMPETENCY: WI Rubric

HORT 262: Seventeen ( $n = 17$ ) student lab journals were blind read by two readers. Of the seventeen, ten (10) were non-CANFRM majors. However, despite this dual population, students showed no differentiation in skill for the artifact measured:

Student Major	Reader 1			Student Major	Reader 2		
	Learning of course materials (vocabulary)	Prose/ Discourse	Analysis/ Insight		Learning of course materials (vocabulary)	Prose/ Discourse	Analysis/ Insight
Hawaiian Studies	3	3	3	Hawaiian Studies	3	3	3
Exploratory Health Sciences	2	3	2	Exploratory Health Sciences	3	3	3
Mathematics	3	2	2	Mathematics	3	2	1
General-Undeclared	2	2	2	General-Undeclared	2	2	2
Psychology	3	3	3	Psychology	3	3	3
Art	3	2	3	Art	3	2	3
Environmental Science	3	3	2	Environmental Science	3	2	2
Agriculture	2	2	2	Agriculture	2	2	2
Agriculture	3	3	3	Agriculture	3	3	3
Environmental Science	3	3	2	Environmental Science	3	3	2
Hawaiian Studies	3	3	3	Hawaiian Studies	3	3	3
Agriculture	2	2	2	Agriculture	2	2	2
Business Admin	3	3	3	Business Admin	3	3	3
Agriculture	3	3	2	Agriculture	3	3	2
Agriculture	3	3	3	Agriculture	3	3	3
Agriculture	3	3	3	Agriculture	3	3	3
Agriculture	3	2	3	Agriculture	3	2	2

All seventeen students scored above a 2, with averages of categories ranging from 2.47 to 2.82. Both readers were within 1 point of each other in all assessments, with an interrater reliability factor of 76.5% agreement, correlation = .856.



AG 263: Twenty-one ( $n = 21$ ) student journals on composting were blind read by two readers. Types of majors were not recorded for these students.

Journal	Reader 1			Journal	Reader 2		
	Learning of course materials (vocabulary)	Prose/Discourse	Analysis/Insight		Learning of course materials (vocabulary)	Prose/Discourse	Analysis/Insight
1	2	2	1	1	2	2	2
2	2	2	3	2	3	3	3
3	2	2	2	3	2.5	2.5	2
4	3	2	2	4	3	3	2
5	3	2	2	5	3	2	2
6	3	2	3	6	3	2	3
7	3	2	3	7	3	3	3
8	3	2	2	8	3	2	2.5
9	2	1	1	9	2	1.5	1
10	2	1	1	10	2	1.5	1
11	3	2	3	11	3	2	3
12	3	2	1	12	3	2	1
13	3	2	3	13	3	2	3
14	3	1	2	14	3	2	2
15	2	2	1	15	2	2	1
16	2	2	2	16	2	2	2
17	2	2	2	17	2	2	2
18	3	2	2	18	3	2	2
19	2	2	1	19	2	2	1
20	3	2	1	20	3	2	1
21	2	2	1	21	2	2	2

Averages of categories for all 21 journals ranged from 1.93 to 3.0. Both readers were within 1 point of each other in all assessments, with an interrater reliability factor of 47% agreement, correlation = .61.

Students in this course seemed to struggle in comparison to the ones in HORT 262. Both readers agreed many students struggled with analysis, which would be considered a critical thinking skill (averages for students under each reader were 1.85 and 1.92 respectively). The lower performance on this skill may thus explain the problem with prose—students who are not able to successfully think through major concepts and issues find that their writing in turn also suffers.