The State of COM: Results of Spring 2019 Assessment Projects

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The University Studies Program's 'COM' designation provides a set of outcomes that was designed, intentionally, to be implemented differently across the various courses and programs where COM courses are taught. Taking the view that communication is contextual activity (see, e.g., Thaiss, 2012), it is not the goal of COM as a program to enforce a one-size-fits-all definition on the faculty who teach these courses. **This report attempts to draw a coherent picture of the way that COM courses approach teaching and assessment of student learning outcomes**. (Appendix A provides a quick overview of the seven COM2 and COM3 outcomes.)

Course Participation

COM1	ENGL 1010*					
COM2	COJO 2010*	COJO 2090	ECON 2400	EDST 3000 (2)	ENGL 2015	
	ENGL 2020 (2)	ENGL 2025	ENGL 2090	ENR 2000 (2)	ERS 2500	
	GEOL 2220	FCSC 2200	HP 2020*	MKT 3310	ORTM 2050	
	RELI 2200	SPAN 3050				
COM3	ACCT 4600 online	AGEC 4970	ARE/CE 3210	CHE 4080	COJO 3010	
	ENGL 4010 (3)	ENGL 4999	ENR 4900	ERS 4135	GEOL 4280	
	MATH 4510	MGT 4470	MKT 4450	MLSK 4860	MOLB 4320	
	PHCY 6245**	POLS 4870	SOC 4095	WIND/SOWK 4020	ZOO/BOT 4100	
	HIST 4030***					

Table 1. Courses Participating in Spring 2019 Assessment

* these courses involve multiple sections which all participated in program-level assessment

** Pharmacy's COM3 meets outcomes across PHCY 6245, 6470, 6473, and 6485

*** This course was overlooked during the synthesis phase and is not included in discussion or calculations throughout.

(x) indicates how many sections of this course participated in individual (rather than program) assessment

Participation rate: 67%¹

Assessment² Projects: Some Highlights

Many projects deserve special attention as thoughtful efforts to gauge the effects of teaching on student learning. Beyond the projects described below, many other smaller-scale projects were also well designed and provided useful information for course- or program-level change.

• **COM1: ENGL 1010, submitted by Nancy Small, Director of First Year Composition.** Recognizing that *synthesis* is a key (but potentially vague) value for many genres and across disciplines, Nancy Small

¹ Most information in this report is based on 43 reports from 64 courses who were initially invited to participate. If participation rates are calculated based on *section*-level rather than course-level participation, the percentage grows to 85%+, since several courses with multiple sections (e.g., ENGL 1010, Honors 2020, COJO 2010, PHCY) submitted reports based on multi-section projects. Additionally, very few instructors failed to submit a report without explanation: during the first stage of the process, a handful of faculty requested to opt out based on contextual variables, and again at the end of the report period, another set of faculty provided additional contextual explanations for non-participation. Reasons for not participating included: teaching the course for the first time, planning to leave the university after this semester, handling a family emergency, becoming a new parent, and course cancellation. Analysis began immediately after the report deadline of May 31; a number of reports were submitted but not in time to be included in this analysis.

² For this initial round of projects, *assessment* was defined simply as "looking closely" at instruction, assignments, student work, perceptions, etc. Faculty were offered a variety of project ideas and were encouraged to focus on a limited evaluation of outcomes/assignments in their courses.

coordinated a program-wide inquiry into four types of synthesis demonstrated in student's academic research articles. The cohort of graduate assistants teaching ENGL 1010 participated in evaluating 114 pieces of student work. Results suggest that students were slightly better at integrating their own perspective with that of a source than they were at teasing out differing perspectives between multiples sources. The conclusions will be used to improve teaching materials for next year as well as to set a course for the next two years of ENGL 1010 assessment.

 COM2: COJO 2090, submitted by Paul Nary; ORTM 2050, submitted by Dan McCoy; and GEOL 2220, submitted by Carol Frost

This set of projects, across a range of disciplines, demonstrated strong attention to student perspectives about course materials and activities. All three instructors used an end-of-semester information-gathering element (e.g., a survey or class discussion) as a way to learn about students' perspectives about how well the class met course/program *and* COM outcomes. In all three cases, this integrated approach allowed the instructor to identify successes, gaps, and tensions that will help them redesign the course. For example, Carol Frost learned that students would value more opportunity to work with a specific technology (StoryMaps) for communication disciplinary knowledge; they would appreciate more practice in anticipating and responding to hostile audiences; and that they wished for more opportunity to explore topics before selecting their project format. These responses suggest that students see the value of communication-based activities for deeper engagement with course content.

COM3: MOLB 4321, submitted by Mary Thorsness. Thorsness chose to report assessment of a recent course change. In an effort to improve students' comprehension, management, and integration of scientific research articles in this course, Molecular Biology had decided to incorporate Mendeley (a citation management program) into the course's annotated bibliography assignment. By evaluating the sources, annotations, student perceptions, and references used in student's final research reports, Thorsness was able to determine that this new assignment (1) helped students be better prepared to discuss scientific literature, (2) improved quality and quantity of references in final research reports, and (3) was perceived by students as deepening their engagement with course material and with active reading of advanced disciplinary materials.

Trends: COM Data and Outcomes of Greatest Interest

Because the goal of this first round of assessment was to gather a broad sense of faculty's *self-directed* focuses, instructors were not required to assess a specific outcome(s). The tables below show what types of data were collected (Table 2) and how often each outcome was selected by the instructor as a focus of assessment (Table 3). The total is greater than 100% because many courses focused on more than outcome.³

Table 2. Types of data collected	
Student work (direct assessment)	44.2%
Student perspectives (survey, interview, focus group, course evaluations)	34.9%
Teacher perspectives (focus group, reflective self-assessment)	46.5%

³ Six instructors claimed to focus on six or all seven of the outcomes. In most but not all of these cases, the scope of the assessment was overly broad, making it hard for the instructors to draw meaningful conclusions about many of the outcomes. Generally, the most effective projects focused on no more than three outcomes. Looking forward, this may suggest that specific outcomes should be marked as primary outcomes for assessment at the specific levels (i.e., COM1, COM2, or COM3).

Table 3. COM outcomes investigated as part of assessment*				
SLO1: Breadth	31.0%			
SLO2: Research	38.1%			
SLO3: Purpose/Audience	26.2%			
SLO4: Process	33.3%			
SLO5: Conventions	26.2%			
SLO6: Oral communication	52.5%			
SLO7: Alternative perspectives	40.5%			
* Based on responses from 39 courses				

Trends: Driving Research Questions

The following list of focal questions illustrates the impressive range of issues that concern faculty. *Student/learning focused:*

- Do library visits help the students begin to navigate through different forms of sources, and would the students prefer to learn from their instructor (rather than a reference librarian)?
- Were advanced students in our professional program able to deliver a professional and confident formal capstone presentation/seminar to faculty and peers?
- What do students see as the unique communication-related activities of this class? Do students find those activities valuable for their own educational objectives?
- Does technology inhibit the delivery of effective oral communication projects?
- What struggles or benefits do students see for developing their second-language skills (i.e., reading, writing, public speaking, critical thinking, peer-editing, vocabulary, grammar, organization, citation style) through a research project in a non-English-language-based COM2?
- Are students able to deduce the conventions of a key genre for their profession by looking at examples? Does this effort help them improve in their own writing of that genre?
- Do students understand the differences between summaries, reports and academic papers?
- Does type of genre (memo vs. press release) impact my students' ability to communicate effectively for professional audiences?
- After receiving peer and instructor feedback about online oral presentations, do students improve in the delivery of a brief digital presentation?
- How do students' skills (for integrating research, organizing presentations, and using effective delivery techniques) develop between an introductory speech at the beginning of the semester and a final speech at the end of the semester?
- Do students make connections between different perspectives? Do they recognize the various perspectives that come into play on an interdisciplinary issue?
- Do multiple revisions enable students to more effectively use research and communicate a sophisticated original argument?
- How might reflective, informal writing impact students' ability to communicate and understand varied audiences, their own embedded bias/assumptions, how to engage opposing viewpoints, and describe their own critical thinking processes?
- How effective are semester-long, team-based projects in achieving COM learning outcome 7?
- Does a set of paired research assignments (annotated bibliography and lit review) demonstrate students' ability to find, evaluate, and document information appropriate to their field/discipline?
- How does project-based learning about key course concepts integrate with and enhance oral communication assignments?

Instructor/teaching focused:

- Looking more closely at my final project assignment (a website) over the past several semesters, can I determine what kinds of changes may help students increase (1) coherence/unity across multiple webpages and (2) produce content that better demonstrates key values of the discipline?
- In what ways can I make the presentations in my class more practically applicable?
- How can I get the students to create a strong structure for their analytical arguments?
- How can I get the students to collaborate and to navigate different viewpoints?
- Looking at section syllabi and major assignments, what are the strengths and gaps (across seven sections of the same course) in meeting program outcomes as well as COM2 outcomes 1 (breadth), 6 (formal presentations) and 7 (acknowledging multiple perspectives)?
- How does my approach to implementing the COM3 oral-presentation component compare to the approaches taken by instructors in other disciplines?

Trends: Project Quality

Table 4. Project Rating (based on alignment, scope, clarity, bias, and integration)					
Category 4: Embedded in a thoughtful and programmatic approach	12.8%				
Category 3: Committed, mostly successful individual effort	48.7%				
Category 2: Reasonable but problematic effort	25.6%				
Category 1: Cursory or misaligned project	12.8%				

Overall quality of assessment projects was mixed. On the bright side, over 60% of projects were placed in the top two categories. However, most COM assessment activity was an individual effort, rather than closely aligned with other programmatic assessment efforts.⁴ Category 2 projects often seemed to be driven by a clear instructor bias, in which claims about student performance were often based on limited student-oriented data, being interpreted in a way to support an instructor's predetermined opinion of students.

Instructors' impressions of instructional emphasis and student performance

	SLO1:	SLO2:	SLO3: Purpose/	SLO4:	SLO5:	SLO6: Oral	SLO7: Multiple
	Breadth	Research	Audience	Process	Conventions	Presentations	Perspectives
Average**	3.37	3.17	3.21	3.13	2.77	3.33	2.83
Variance	0.67	0.99	0.82	0.94	0.97	0.80	1.02

** 5-point scale where 0="Virtually no practice/instruction and 4=Substantial practice/instruction

Scores of 3.37 for SLO1 and 3.33 for SLO6 indicate that faculty see themselves as providing fairly extensive opportunities for students to experience a range of digital, oral, and written communication activities (SLO1) and to learn about and deliver oral presentations. On the other end, a score of 2.77 for SLO5 indicates that

⁴ Because this set of projects is the first effort to assess COM courses, this disconnect between COM assessment and other levels/focuses of assessment is logical. Moreover, instructors were encouraged but not required to align their COM assessment with programmatic assessment. In some cases, such alignment was clearly very productive, but in other cases, the attempt to meet COM assessment requirements by reporting results from program evaluation led to problematic conclusions.

faculty recognize that they may not be providing limited opportunities for students to learn and practice adhering to typical conventions of academic or specialist/disciplinary norms of communication.

Table 0. Res	polises. By i	ine enu or tr	le semester, now su	iccessiui/en	ective are your s		s this outcome!
	SLO1:	SLO2:	SLO3: Purpose/	SLO4:	SLO5:	SLO6: Oral	SLO7: Multiple
	Breadth	Research	Audience	Process	Conventions	Presentations	Perspectives
Average**	3.13	2.68	3.23	3.23	3.00	3.32	2.94
Variance	0.76	1.11	0.68	0.67	0.89	0.87	0.81

Table 6. Responses: By the end of the semester, how successful/effective are your students in achieving this outcome?*

* Results are based on the 25 reports which included responses and which were submitted within 2 weeks of requested deadline. In one case, the instructor asked the students to self-evaluate their success/effectiveness in achieving the outcomes.
** E point scale where 0="Majority continue to struggle" and 4="Majority of students achieve considerable success".

** 5-point scale where 0="Majority continue to struggle" and 4="Majority of students achieve considerable success."

Faculty seem to be relatively satisfied with performance of most students across all outcomes. Low averages for SLO2 and SLO7 suggest that COM and other courses may need to further develop students' information-literacy skills and their ability to acknowledge and respond to alternative perspectives.

Trends: Synthesizing Across Projects

Observation 1: Talking about teaching in interdisciplinary groups seemed to be a valuable tool for generating ideas for new or modified approaches. One instructor who participated in a cross-disciplinary focus group commented:

I was especially struck by my colleagues' focus on the idea of how the audience perceives an oral presentation—and, further, what an audience can do with the information presented. This seemed to be a main definition of effectiveness from a business colleague in the focus group, and it's understandable in that the main goal in business is to sell, thus the import of the audience's impression. But it did make me think more about the student audience in a classroom--what might they do with the info presented, and how might they process it, rather than just be nervous about their turn in front of the class.

Observation 2: Instructors who directly taught and assessed strategies for conducting focused disciplinary research were generally pleased with results of these efforts. Across English Studies, Agriculture Economics, and Molecular Biology, faculty who assessed a specific approach to coaching students' development of *disciplinary* research found that their efforts were mostly effective. One instructor in Communications expressed dismay at students' deficits in conducting research; interestingly, that course's assignment had a less narrow disciplinary focus than did the other courses--suggesting that students may be more engaged in research when it is connected directly to their learning in the disciplines.

Observation 3: Though SLO4 (technology/revision/collaboration) was often not identified as the central/focal outcome of assessment, many faculty were quite interested in learning more about student changes in response to instructor and peer feedback. Perceptions about the value of revision/iterative drafting/multiple opportunities to practice were quite diverse:

- From an instructor in Education: "For the final course paper, ~1/3 of the students (approx. 7) just end up cleaning up their reports and do not incorporate any testable hypotheses into the discussion. Generally, it feels that these students are hesitant to incorporate their own ideas and critical thinking into the research topic that they picked. Kind of funny in some ways... I feel that it reflects an educational program in our major that doesn't encourage much critical thinking by the students overall."
- From an instructor teaching in School of Energy Resources: "The biggest take away of these results is that while some methods may support student's growth as writers, there is no substitute for individualized instructor feedback. While other methods seem to support that feedback and hopefully

reduce the total amount of feedback required – it will be important to provide intermediate feedback on multiple stages of the assignment."

• From an instructor in English: "As senior English majors, the students produced first drafts which, on the whole, met "passing" criteria, except for when it came to argumentative coherence. These papers had a subject, research and analysis; however, integration into a clear thesis and argumentative structure was lacking. After conferences on the first draft to discuss these issues, students were able, with their second draft, to move at least to the "pass" category In all criteria except for the effective use of transitions, with some students achieving "high pass" for criteria related to argument and analysis. A third draft moved all but one student completely into the "high pass" category. This third draft was especially important for style, transitions and depth of analysis."

Observation 4: Faculty who described/evaluated projects with "authentic" audiences or purposes beyond the *classroom generally seemed more engaged in the communication aspects of the course.* Courses in Marketing, Disability Studies, Communication, and Geology (among others) described projects that were designed for real or hypothetical audiences beyond the classroom setting. These instructors seemed able to create activities that coherently and logically integrated the COM outcomes throughout the experience. Of note, too: These instructors treated students as co-participants in knowledge making, rather than merely as recipients of content knowledge.

Observation 5: Guidance/instruction for "effective" presentations may lag behind guidance for written work. This sentiment was captured most clearly by the report from ENGL 2015, which described an assessment project based in part on analysis of multiple instructors' syllabi for the course:

"Many instructors indicated that they did not believe they included appropriate evaluation and genuine instruction in presentation skills. In five of the course syllabi, presentation credit was included within the grading category "Participation"; as a result, the presentation credit was not delineated from other participation and in-class work, which could indicate that it is not taken as seriously as written and digital communication in the grading scheme of the course. The instructors' perception that oral presentations were not taught as explicitly as other genres also showed up in assignment prompts. While written and digital assignments frequently included rubrics or completion checklists, most of the oral presentations did not include evaluation criteria."

Observation 6: There is not a single universal definition of "good communication." Not only across disciplines but also within them, different types of assignments produce different outcomes.

- From a participant in a COM assessment focus group: "Different departments have very different interpretations of what sorts of perspectives need to be engaged to adequately fulfill SLO7. ... This points to the assumptions of each discipline as to what is expected of those that we encounter in our fields."
- From an instructor who assessed student performance on two different kinds of genres within his course: "Students were more likely to demonstrate effective tone/voice when writing a press release than a Memorandum of Understanding, but more likely to demonstrate clear structural elements when writing an MOU than a press release."

Observation 7: For faculty who inquired about oral speaking, there seemed to be some recognition that they often do not think through the interactive aspect of presentations—that the audience should also be thought of as having a role to play and that presentations need to be developed with consideration of audience and purpose. On the other hand, though, one instructor from Environment and Natural Resources perceived a relationship between active listening skills developed in interviews and an increased ability to acknowledge multiple perspectives during formal presentations.

Observation 8: Some faculty (including some who were initially skeptical of "digital" and "oral" requirements) can see the positive impacts of these changes for the disciplinary or "content" knowledge of the course. As one Mathematics instructor noted:

"In my experience, mathematics education at the undergraduate level rarely involves anything like these oral presentations. This is unfortunate, because oral presentations are a part of how mathematics is presented in many contexts. ... Therefore, students in a COM3 math course are probably being asked to communicate mathematics orally and yet formally for the first time in their undergraduate career.

Including an oral component in a math course gives students an entirely new way of processing and expressing their mathematical knowledge. This experience allows them to see mathematics from a new perspective, to process it in a new way, and to develop new skills for conveying what they have learned to others."

Closing the Loop: Possible changes to be implemented

Based on their analysis of information gathered for assessment, instructors identified a wide variety of possible changes to their instruction, curriculum, or assignments. Broad trends suggest that faculty see value in turning more of their attention to a supported writing *process*; to *meta-cognition, reflection, and exploration*; to *critical thinking through exploring alternative perspectives;* and to *technologies and genres for communication*.

Provide more/better samples Tailor library instruction for course/discipline • • • Provide more scaffolding Add/modify peer review process Include more mini oral presentations Incorporate rhetorical reading activity • Alter/clarify rubric (incl. to align with COM Smooth students' access to professional • outcomes) experts/sites Increase critical thinking via multiple hypotheses Teach document design • • Increase engagement with diverse/conflicting Make programmatic changes to encourage students' increased use of appropriate evidence perspectives Extend exploration stage for major project Increase technology support/guidance • Deepen commitment to interactive assignments Survey students to learn about their self-efficacy • that students see as especially relevant/unique perceptions Provide clearer document sections to help students Increase instruction/training in how to gather, • ٠ achieve greater/broader disciplinary awareness analyze, and synthesize conflicting perspectives Strengthen relationship of oral and written Ensure that students know how to view feedback in • components of a project **WyoCourses** Increase level of student reflection/meta-cognition Present findings to next year's instructor group (for • • about their engagement with content multi-section course) and provide sample activities to help them better address identified gaps Allow additional revision

Looking forward: Requests for additional programming/resources

Although a handful of instructors indicated that they didn't believe they needed additional support, many provided at least one idea for programming that might help them better achieve their goals for student learning in their COM courses. One instructor, for example, commented, *"I would look forward to participating in a debrief or sharing around key takeaways from this assessment project—I would very much value other perspectives on these SLOs!"*

The most common responses fell into these general categories:

1. Facilitated discussions (or ongoing learning communities) among diverse groups of instructors. Several instructors said that they benefitted from talking with faculty from programs unlike their own; they valued the opportunity to exchange ideas and to learn from the experience and approaches of others.

- 2. A strong cohort of colleagues to help guide common curriculum, assessment, teaching, etc. Participants who gave this response generally indicated that they enjoyed working in an existing group of committed, like-minded people and that they benefitted from being able to share challenges and successes with this group. In one case, an instructor wished for a stronger cohort mentality among multiple sections of the same course. Often these programs were overseen by a coordinator or director whose job description recognized this type of work as integral to effective program delivery.
- 3. **Online/supplementary materials.** A few instructors indicated that a resource bank of materials related to teaching oral, written, and digital communication may be helpful.
- 4. Workshops/training on specific topics. A variety of topics were mentioned, but few were mentioned by more than one instructor; this trend suggests that the specific needs/concerns of COM instructors are quite diverse and based on specific approaches to course content and activities.
 - Refresher on COM outcomes/purposes, or a session about focuses/priorities of COM1 (to help COM2/COM3 instructors understand what students should already know)
 - Approaches to WyoCourses and other technologies to support COM teaching and learning
 - Strategies for effective/efficient feedback on communication assignments
 - Assignment roundtables: What's working?
 - Issues of race and gender, especially in STEM
 - Panel of successful technical/professional writers
 - Website design
 - Ideas for planning ongoing/multi-year assessment ideas/projects
 - Assessment project debriefing
 - Strategies for teaching research methods, especially related to "digital humanities" age

Conclusions

Admittedly, the distributed assessment approach used this year makes it difficult to make generalizable comparisons across courses. However, the approach *is* in alignment with accepted understandings of communication as contextual activity. Results from this year's projects demonstrate that this model has capacity to engage faculty in responsive, self-directed inquiry. More importantly: despite a handful of rushed or biased reports, the overall set of changes proposed in the reports suggest that faculty *do* often see this assessment work as a valuable way to enrich their teaching.

Outcome	COM2	СОМЗ
and central focus	(full outcome description)	(full outcome description)
Outcome 1:	Develop and communicate written,	Use the discourse of a discipline or
Gaining a breadth of	oral, and digital messages through a	interdisciplinary field to communicate that
communication	variety of assignments that include	field's subject matter to academic or
experience	discipline-based or interdisciplinary	professional audiences through written,
ехрепенсе	purposes, forms, and audiences.	oral, and digital communication
Outcome 2:	Find, analyze, evaluate, and document	Find, analyze, evaluate, and document
Conducting and using	information appropriately using a	information appropriately as applicable to
research effectively		the discipline, interdisciplinary field, or
research enectively	variety of sources.	
		professional setting, as demonstrated by
		completing a substantial communication
		project that requires appropriate research skills
Outcome 3:	Understand the different purposes of	Recognize and evaluate more advanced
Developing	written, oral, and digital messages and	aspects of communication that respond to
appropriate structures	employ appropriate organizational	the purposes and needs of audiences in a
for specific audience(s)	strategies, including developing thesis	discipline, interdisciplinary field, or
and purpose(s)	statements and main ideas.	professional setting
Outcome 4:	Make effective use of multiple drafts,	Make effective use of multiple drafts,
Making use of	revisions, progressive assignments,	revision, computer technology, peer and
effective processes ,	computer technology, peer and	instructor comments, and collaboration to
technologies, and	instructor comments, and collaboration	show understanding of communication
collaboration	in the achievement of a final work of	standards in a discipline or
	communication.	interdisciplinary field.
Outcome 5:	Observe the accepted conventions	Observe the accepted conventions of
Understanding and	including spelling, grammar,	spelling, grammar, organizational
responding to	organizational structure, punctuation,	structure, punctuation, delivery and
conventions	delivery and documentation in oral,	documentation expected in disciplinary,
	written, and digital messages.	interdisciplinary, or professional contexts
Outcome 6:	Deliver prepared presentations in a	Deliver presentations in a confident and
Delivering effective	natural, confident, and conversational	professional manner, consistent with the
oral presentations	manner, and display nonverbal	standards of the discipline or
	communication that is consistent with	interdisciplinary field
	and supportive of the oral message.	
Outcome 7:	Interact effectively with audience	Interact effectively with audience
Engaging with	members, engage opposing viewpoints	members, engage opposing viewpoints
opposing perspectives	constructively, and demonstrate active	constructively, and demonstrate active
	listening skills.	listening skills

Appendix A: Central focus and specific language for the COM2 and COM3 outcomes