**An Interview-Based Study of Undergraduate STEM Writers in East Africa**

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*Institutional Description*

I’m a faculty member at the [University of Connecticut](https://uconn.edu/about-us/), a US public research university, and you can find more on my background [here](https://english.uconn.edu/wp-content/uploads/sites/3337/2019/10/DeansCV-May2021.pdf). At UConn I teach undergrad and grad students, lead workshops for faculty and teaching assistants on writing across the curriculum, and direct a large [writing center](https://writingcenter.uconn.edu/) (and we are open to international collaborations!).

During 2021-22 I was a visiting [Fulbright](https://www.wlnjournal.org/blog/2021/09/deans-fulbright-1/) scholar at [Uganda Christian University](https://ucu.ac.ug/), where my main tasks were to teach and to [found a writing center](https://www.wlnjournal.org/blog/2021/12/toward-a-writing-center-in-uganda-the-proposal-stage/), but I also conducted the first stages of the emerging research I’m bringing in this workshop. UCU was founded as a theological seminary for Anglican clergy 100 years ago but re-founded 25 years ago as a comprehensive university with faculties in law, science, agriculture, theology, social sciences, business, communication, and medicine. Given the British colonial legacy in Uganda, UCU follows the conventions of British higher education, but it also has strong American influences (such as a first-year writing program and required first-year writing course) because American academics were part of re-founding the university and continue to influence it.

UCU is striving to become more research-active and it has its own Research Ethics Committee, which reviewed and granted approval for this study. The methods are [nearly identical to a previous study I did at my home institution](https://wac.colostate.edu/docs/atd/volume19/deans.pdf) that was approved by UConn’s Institutional Review Board. Ugandan researcher Pamela Tumwebaze assisted with recruitment of participants and will contribute to analysis.

Since English is the language of instruction, government, and business in Uganda, all research was done in English, although all participants were multilingual.

*Research questions*

* What are the attitudes and dispositions of undergraduates in science and technology (STEM) toward writing, and how were those shaped?
* What do undergraduates think about the ways they have been taught to write in earlier schooling as well as in the university?
* How do they navigate writing tasks in their majors?
* How do they think about writing in their lives more generally?
* How do they anticipate writing will figure in their future careers and lives?

*Current status of research project*

I had hoped to be further along in this project by now (don’t we all?). The interviews that I conducted and recorded with 15 students (2 interviews each) while in Uganda in January/February/March 2022 are sitting in [OtterAI](https://otter.ai/), which does auto-transcription. But I have not yet reviewed those 30 transcriptions for accuracy yet or begun analysis. By our meeting in February, I aim to have reviewed and corrected the transcriptions, segmented the data, and made some progress on creating codes and doing initial analysis.

*Methods*

I designed this study to extend a one that I carried out at my home US institution and that was [recently published in Across the Disciplines](https://wac.colostate.edu/docs/atd/volume19/deans.pdf). That article includes a Methods section that applies to this study; it also includes an appendix with the interview questions.

Those methods and interview questions are the same for this study, except that for the US-based study, I focused on exceptionally high achieving STEM students—that is, undergraduates who had won competitive fellowships and were working in labs across multiple years. Recruiting a similar cohort was not a viable option for Uganda because undergraduates at UCU do not have access to either the ongoing lab/undergraduate research opportunities or the summer internship/research experiences of the US participants.

I interviewed the 15 undergraduate STEM majors twice, and students were paid a small stipend for each session (about the cost of a nice dinner). The first 45-minute interview focused on personal literacy history/writing development; the second 45-minute session focused on writing process and practices, using a sample of recent academic or personal writing each was instructed to bring to the interview. I also asked about what they find meaningful (or not) in their academic and personal writing lives and why, because I wanted to compare findings with the [Meaningful Writing Project](https://meaningfulwritingproject.net/). I asked how they think about the relationship of science/engineering to writing, how they anticipate writing will figure in their future professional selves, and how they think communication/writing should be taught to STEM majors.

*Key Theorists*

My project is most shaped by the US writing across the curriculum/writing in the disciplines movement, which started 50 years ago as an effort to reform teaching and curriculum and later developed into an interdisciplinary research field. I anchor my work in the ongoing conversations of that field, assuming that readers are familiar, for example, with the acronyms for and distinctions between *writing across the curriculum* *(WAC)* and *writing in the disciplines (WID),* as well as with such terms as *writing to learn*, and that they can situate my claims within the historical changes in WAC/WID. However, for the Uganda study, I will need to rethink that somewhat.

I’m influenced most by the work of scholars such as David Russell, who combine historical, theoretical, and empirical methods. And I share Russell’s affinity for [Activity Theory](https://wac.colostate.edu/books/perspectives/selves-societies/), even though I do not directly employ activity theory in this study.

While I’ve done [a little work on Actor Network Theory](https://digitalcommons.fiu.edu/communityliteracy/vol15/iss1/7/), I will likely need to dive deeper into this for the Uganda study.

I was trained in the humanities, and while I have done a few [interview-based studies](https://docs.lib.purdue.edu/cgi/viewcontent.cgi?article=1840&context=wcj), I still don’t feel especially confident in methods for coding transcripts and consider that one of my research weaknesses (and that one reason that I have often sought out co-researchers/authors for my interview-based studies). I feel more confident doing case studies, connecting observations to theory, performing thematic and [typological analysis](https://methods.sagepub.com/reference/sage-encyc-qualitative-research-methods/n472.xml), and reviewing/synthesizing the literature.

One exigency for this study that isn’t really about theoretical methods but is significant is that there is very little published on academic writing programs in East Africa, so one of the things that needs to be done is simply document what is happening there and make it more widely visible in writing studies (and given that, even approaches such as describing programs can be valuable—after all, disseminating program descriptions was important early stage in WAC studies). I may co-propose with some colleagues a new volume focused on East Africa for the [International Exchanges in the Study of Writing](https://wac.colostate.edu/books/international/) book series (the editors of that series have informally encouraged just such a volume). It could include program descriptions/analyses/surveys, theoretical pieces, and empirical studies grounded in ongoing and emerging work in that region. Those interested in contributing should be in touch.

*Initial hunches*

As I noted above, I have not begun the formal analysis of the interview transcripts, but based on the earlier study and on my intuitive sense of the interviews from Uganda, here are some tentative themes:

* Dispositions: The attitudes of both cohorts of these science students (Ugandan and American) toward writing were significantly more positive than earlier research ([Emerson](https://wac.colostate.edu/books/perspectives/emerson/)) suggests. Students in both cohorts testified to multiple purposes and priorities for their writing, These claims need to be contextualized: recall that the US participants were exceptionally high achieving students—people for whom school had always been an affirming environment—and in Ugandan culture students tend to put a positive spin on schooling for those in authority, which might be especially the case when reporting to a visiting American professor.
* Students in both cohorts tend to associate "writing" more with personal agency than with professional or disciplinary status. And for many, their most meaningful writing is adjacent to or outside the disciplinary sphere. This invites some intriguing comparisons with the [Meaningful Writing Project](https://meaningfulwritingproject.net/) and findings coming out of [a recent University of Michigan study](https://www.press.umich.edu/10079890/developing_writers_in_higher_education), and runs contrary to much theory in WID.
* Social networks: As they take on unfamiliar or challenging academic or research writing tasks, STEM students in both cohorts default more to social networks than any other resource (more than to instructors, books, websites, writing centers, etc).
	+ The research-active US students looked to those in their labs (grad students, peers, faculty mentors) as sponsors
	+ The Ugandan students turned mostly to fellow students/peers, especially those in their same major/faculty but year ahead of them, as their learning network. This should be put in cultural/institutional context: the Ugandan students do not work in labs on campus or have access to graduate students; their curriculum is much more prescribed and linear than for US majors, meaning all students in a given faculty/major take the same classes in the same sequence; and faculty/student relations tend to more distant and hierarchical than in the US, leaving them with little informal/out-of-class access to faculty.
* Schooling: Students in both cohorts are eager for more feedback on their writing, especially from their STEM faculty, but generally do not receive it, at least not in regular coursework. Most testify to some writing transfer from courses outside STEM to their STEM course tasks.

*Glossary*:

* Writing Across the Curriculum (WAC)
* Writing in the Disciplines (WID)
* Writing to learn
* Social networks