Developing an App to Support Ungrading: Making Non-Traditional Grading Easier with a Standalone Web Application

### 1. Title:

Developing an App to Support Ungrading: Making Non-Traditional Grading Easier with a Standalone Web Application

**Abstract:** Instructors who use non-traditional grading are often limited by institutional learning management systems and forced to engineer complex workarounds. The goal of this collaboration is to design a standalone web application to support assignment submission, feedback exchange, and final grade calculation according to grading schemes customized by the instructor.

By the end of the conference, our group will deliver app specifications, preliminary wireframes, and a justification statement which we will later expand into a co-authored publication. After the conference, we intend to pursue app development, starting with a proof of concept. As a group, we will decide how far we want to take the app and how to distribute it.

We seek collaborators with entrepreneurial spirit, obsessions with assessment, and experience programming or coding. Those who want more experience with user-interface design or ungrading are encouraged to apply along with those who already have deep knowledge in these areas.

### 2. Facilitator information:

Michelle Cowan (she/her), Assistant Professor of Business Administration at Washington & Lee University, mcowan@wlu.edu – Michelle’s scholarship focuses on assessment and equity in the classroom, the workplace, and healthcare. In 2020, she published a history of grading contract use in composition in the *Journal of Writing Assessment* and has an article, co-authored with Dr. Callie Kostelich, coming out in the Fall 2023 issue of *Peitho,* describing a program-wide grading contract initiative developed with a team of graduate students at Texas Tech University. She is committed to practicing anti-racist assessment and training others in grading methods that are inclusive of neurodiverse students.

Elizabeth (Liz) Matthews (she/her), Assistant Professor of Computer Science at Washington & Lee University, lmatthews@wlu.edu - Professor Matthews is interested in research which explores all aspects of video game design with an emphasis on the human factors involved. She seeks to develop new tools and metrics for the measurement of the subjective experience of playing video games. Professor Matthews teaches introductory computer science as well as human-computer interaction, video game design, and computer graphics.

Joe Schicke (he/him), Instructor at Colorado State University, joschick@ttu.edu – Joe is currently a PhD student in Technical Communication and Rhetoric at Texas Tech University, focusing on rhetorical theory, sensory rhetoric, multimodality, and alternative grading practices. At Colorado State University, he teaches a range of composition classes and leads instructor training in non-traditional assessment. Joe recently completed an interview project in which he gathered information about how instructors from different universities are implementing alternative grading practices.

### 3. Primary Contact:

Michelle Cowan – mcowan@wlu.edu

### 4. Description:

Do you use non-traditional grading and find yourself frustrated by the constraints of your institution’s learning management system? Are you a strong coder interested in developing apps for inclusive education? If you fall into either of these categories, collaborate with us.

Those of us who use non-traditional grading approaches are often limited by the learning management systems employed by our institutions. We are forced to engineer complex workarounds when trying to employ point-free grading schemes in platforms like Canvas or Blackboard. The goal of this collaboration is to create a standalone web application that will allow students to turn in work, instructors to enter feedback, and both students and instructors to view feedback and calculate final grades without points or letter grades attached to each assignment. The app would allow instructors to customize their grading schemes according to the system they choose.

During the Watson conference, our group will bring people who use non-traditional grading schemes together with people who have design or coding experience so we can create an application that will improve upon existing grade management systems. By the end of the workshop, we will have composed specifications detailing the features of our app, created a set of wireframes illustrating our planned design, and written a justification statement for our design, which we will later expand into a co-authored publication.

After our initial week of work, we intend to continue working together to develop a proof of concept. As a group, we will decide how far to take the app and how to distribute it. We seek collaborators with entrepreneurial spirit, obsessions with assessment, and experience programming applications of any kind. Those who want more experience with user-interface design or ungrading are encouraged to apply along with those who already have deep knowledge in these areas. The workshop will be largely devoted to human-computer interaction (HCI) design activities.

This project is intended not only to ease the workload of instructors using non-traditional grading, but also to actively support more experimentation in assessment. Assessment in composition classrooms can perpetuate inequities (Blum, 2020; Carillo, 2021; Inoue, 2012, 2019), so making space for innovation in the actual academic infrastructure is critical to ensuring successful learning outcomes for all students (Blum, 2020; Carillo, 2021; Ferns et al., 2021) and equitable working conditions for instructors (Kahn, 2020; Mendenhall, 2014; Welch & Scott, 2016).

*References*

Blum, S. D. (Ed.). (2020). *Ungrading: Why Rating Students Undermines Learning (and What to Do Instead)*. West Virginia University Press. https://muse.jhu.edu/pub/20/edited\_volume/book/78367

Carillo, E. C. (2021). *The Hidden Inequities in Labor-Based Contract Grading*. University Press of Colorado. http://www.jstor.org/stable/j.ctv20zbkwn.4

Ferns, S., Hickey, R., & Williams, H. (2021). *UnGrading, Supporting our Students Through a Pedagogy of Care*. *12*(2).

Inoue, A. B. (2012). Grading contracts: Assessing their effectiveness on different racial formations. In A. B. Inoue & M. Poe (Eds.), *Race and Writing Assessment* (pp. 78–93). Peter Lang.

Inoue, A. B. (2019). *Labor-Based Grading Contracts: Building Equity and Inclusion in the Compassionate Writing Classroom*. University Press of Colorado.

Kahn, S. (2020). We Value Teaching Too Much to Keep Devaluing It. *College English*, *82*(6), 592–611. https://doi.org/10.58680/ce202030805

Mendenhall, A. S. (2014). The Composition Specialist as Flexible Expert: Identity and Labor in the History of Composition. *College English*, *77*(1), 11–31.

Welch, N., & Scott, T. (2016). *Composition in the Age of Austerity*. University Press of Colorado.

### 5. Annotated schedule:

#### Day 1

* 3-3:45 - Sharing participant experiences with ungrading and frustrations with existing learning management systems
* 4-4:30 - Presentation of preliminary idea for an application and discussion of options
* 4:45-5:15 - Discussion of ungrading scholarship as a refresher/starting justification statement
* 5:30-6 - Brainstorming functionality

#### Day 2

* 12-12:30 – Review of yesterday’s functionality discussions plus additional brainstorming
* 12:45-1:30 – Playing with spreadsheets, wireframing, and shaping lists of features in small groups
* 1:45-2:45 – Sharing what we learned in our groups and building out wireframe
* 3-4 – Deciding on and working in groups of choice (wireframe tweaking, specifications, coding planning, justification writing)
* 4:15-4:45 – Sharing of group work, reflecting on progress, and planning next breakout group session (changing groups is okay)
* 4:45-5 – Touching base with groups of choice on next steps and breaking for the evening

#### Day 3

* 12-12:30 – Review of yesterday’s progress, reflection on experience so far, and planning what we can complete today
* 12:45-1:30 – Work with groups of choice
* 1:45-3 – Completing functionality list, wireframes, and justification statement; deciding who will present at the showcase; planning next steps for after the conference

### 6. Modality:

Zoom (Feb 28-Mar 1)

### 7. Number of participants:

4-15

### 8. Participant background:

We are looking for a mixture of experience levels. We definitely need people with experience using non-traditional assessment methods such as ungrading, contract grading, and specifications grading, because your feedback is essential for this design. In addition, we invite individuals with design, user experience, or coding experience.

That said, this collaboration is also a learning opportunity for individuals interested in ungrading, user-interface design, and coding but who have less experience. You will be a participant-researcher, in a sense, during the usability activities we will take on together and will learn usability and design processes along the way.

### 9. Preparation:

Please download [LaTex](https://www.latex-project.org/) prior to the conference. We will use it as our collaborative writing/word processing tool.

We will provide a sample grading spreadsheet, an example rubric, a sample grading scheme, and a list of recommended readings prior to the conference. We will also ask participants to share their own spreadsheets, rubrics, contracts, and assessment methods if they have developed them so we can see how our approaches align prior to the conference.

### 10. Final-day deliverable:

By the end of the conference, we will present a set of specifications describing the functionality we need and a set of wireframes depicting the design we are envisioning. We also plan to write a justification statement explaining the purpose of the design, citing significant scholarship to back up our design decisions. The statement will later be expanded into a co-authored publication. The wireframes and a verbal explanation of our specifications will be the main things we share at the final presentation.

### 11. How will participants get credit?

Our project justification statement will grow into a co-authored publication explaining our ungrading application design and the reasoning behind it.

### 12. What happens after the conference?

Participants who continue with the project to create a proof of concept will decide as a group how to proceed with the development of the application itself—which may be stopping with a proof of concept, creating an open-source application, promoting a paid resource, or pitching our design to existing learning management system companies.

### 13. Working and learning environment:

We are committed to an environment of inclusivity, keeping in mind the [2021 Watson Conference Commitments](https://louisville.edu/conference/watson/history-and-conference-archive/conference-archive/past-conferences/2021-watson-conference/2021-watson-conference-commitments).

*We will welcome our whole selves.*

We will schedule regular breaks and include a variety of activities, including individual brainstorming, collaborative wireframing, individual and collaborative writing, active user testing, and group discussion.

*We will approach the conference as a space for learning and growth.*

Our group will include people with strengths in different but complementary skills. Some will come with immense assessment knowledge; others will be more devoted to coding and programming. Those with curiosity but less experience in these areas will learn through usability activities and discover their own expertise as we share teaching experiences.

*We will connect through play.*

Our project requires play! We will be experimenting with different options and will actively innovate. Our project is inclusive of people who feel more comfortable organizing and structuring information as well as those who like to make a mess and throw every idea out onto the floor.

*We will honor our interlocutors with our communication choices.*

We will respect people’s pronouns, recognize expertise, and not limit anyone based on an identity group.

*We will co-create a culture of access while recognizing that this work is never complete.*

At our sessions, individuals are welcome to use the technology of their choice. We will provide captioning as necessary and can work through writing or typing as necessary. Once we know the accessibility needs of our group, we will ensure every individual can listen, read, interact, and contribute in their own way. We will encourage participation from those who may have difficulty voicing their opinions.

*We will actively attend to power dynamics in participation—and we will name and interrupt these dynamics as needed.*

We have scheduled reflection periods throughout the conference, where we look back at the work completed thus far and see where we may have missed a perspective or idea. We are willing to scrutinize our choices and revise as we realize we have missed crucial opinions or perspectives. Every person in the group is a tester and can voice their opinions and needs throughout the development process.