Circuit Roadmap

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Next update date: not scheduled

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In Development

Enhanced Charlie Feedback

What we are doing:

Integrating newer machine learning models and OpenAI GPT-4 Language Model API to produce improved, qualitative feedback.

Why we think you'll like it:

Charlie has been able to produce feedback in the past by providing score predictions for student essays. With the integration of GPT-4, this will allow us to produce descriptive feedback and suggestions. Students will be given areas of improvement and high-level suggestions for each of the criteria in a rubric.

Completed

Cornerstone Charlie Support

What we did:

We added features to make it easy to train, choose, and attach Charlie-enabled rubrics.

Why we think you'll like it:

Since Charlie has shown itself to be beneficial to learning outcomes and engagement in SOC 220, more interest is beginning to show. This will allow future courses to take advantage of the Charlie features.

Instructor Manual Scoring

What we did:

We have implemented a feature that allows instructors to manually review each student's submission and for that review to affect the student's overall grade. This feature can be turned on optionally per assignment.

Why we think you'll like it:

While the peer review and self review phases are the main benefits of using Circuit, some instructors may want to review submissions as well. Allowing the instructor review to affect the score will also allow the instructor to help normalize the final scores.

Automated Grading

What we did:

The Circuit team has developed a machine learning-based automated evaluation tool ("Charlie") for automated grading via a prediction model trained on a large corpus of instructor-graded essays. It allows students to get an instantaneous "pre-flight" evaluation prior to submitting their essay for peer review. This has been deployed in SOC 220. Research has shown that it led to improved learning outcomes vs. other sections not using Charlie. Feedback we've received from students and even from President Daniels indicates that it would be much more useful if it gave specific feedback on how learners can improve their essays.

We were able to train "Charlie" to predict the scores for an essay on several important rubric criteria associated with the assignment. We are updating Circuit to use these predictions in Charlie's real-time feedback. This will indicate to the learner which specific areas of their essay are most in need of improvement.

Why we think you'll like it:

Circuit and peer review can save instructors time and reduce their grading burden. Automated grading could improve learning and retention via instantaneous feedback based on real instructor evaluations.

Feedback enhancements

What we did:

We have implemented enhancements to the feedback process that allow instructors to require feedback for the calibration, peer review, and self review phases. If feedback is required for a phase, students cannot submit evaluations for that phase without including feedback.

Why we think you'll like it:

Peer feedback is an important part of peer review. Improving Circuit's feedback functionality can make this process more flexible and more powerful.

LTI integration: deep linking of Circuit assignments

What we did:

Allow instructors to link to existing Circuit assignments from their course in Brightspace.

Why we think you'll like it:

Linking directly to a Circuit assignment from Brightspace improves communication with students about which Circuit assignment they need to be working on and increases convenience for instructors and students.

Learn more:

- Circuit integration with Brightspace

Participation grading for non-calibrated assignments

What we're doing:

We added an optional participation grading method for non-calibrated assignments. This allows participation grading to be used for any assignment phase in a non-calibrated assignment.

Why we think you'll like it:

Many instructors use Circuit for low-stakes peer reviews. For non-calibrated assignments, participation grading offers a low-stakes alternative to Circuit's standard grading method and allows Circuit to better match the existing workflow of instructors.

Autosave text submissions

What we're doing:

We are adding autosave functionality to student text submissions. As students input their submissions, Circuit autosaves their work and displays the last saved date. Submissions can still be saved manually.

Why we think you'll like it:

Autosave reduces the chances of a student losing a submission due to technology issues and provides greater peace of mind for students and instructors.

LTI integration: authentication, roster sync, and grade push

What we did:

Allow instructors to link to Circuit from a course in Brightspace.

Why we think you'll like it:

LTI integrations take a little effort to set up, but then create a seamless experience between Brightspace and Circuit. LTI linked courses allow students and instructors to open a link to Circuit without having to login a second time. Roster sync will automatically keep your class list in Circuit up to date. Automatic or manual grade push will add assessment scores from Circuit into your Brightspace grade book.

Learn more:

- Circuit integration with Brightspace

Email notifications

What we did:

Circuit now sends email notifications to students, instructors, and graders. A user can turn off their email notifications from their settings page.

Students will receive notifications when:

- A Circuit assignment has started
- They have met the requirements for the currently active phase
- A phase will end soon and they have not yet completed all requirements for that phase (this will be sent when the phase is 80% over)
- An assignment has ended
- An assignment has been cancelled by the instructor
- The dates and times for an assignment have been changed by the instructor
- They are granted a late permit by the instructor
- A late permit has been revoked by the instructor

Instructors and Graders will receive notifications when:

- They have been added to another instructor's course
- They have been removed from another instructor's course

Why we think you'll like it:

Email notifications help students be more aware of their Circuit assignments. We hope that email notifications result in fewer students forgetting to do their Circuit assignments. Email notifications also serve as receipts of their assignment activity within Circuit.