



Variate Roadmap

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In Research

Course Copy

What we're doing:

Allow instructors to create a copy of an existing course.

Why we think you'll like it:

Save time setting up a course at the start of the semester.

New Randomizations

What we're doing:

Allow students to get a new randomization of a problem.

Why we think you'll like it:

Make it easy for students to have additional opportunities to practice concepts important to course outcomes.

In Development

Short answer problems

What we're doing:

Add short answer problem type to allow students to give typed-text responses to questions.

Why we think you'll like it:

Short answer problems will give instructors more options to assess learning objectives. Instructors can grade and provide feedback by student response groups.

Select multiple problems from a pool

What we're doing:

Current problem pools will randomly select one problem for each student. We will change this to allow instructors to configure how many problems they want to pull from a pool.

Why we think you'll like it:

Improves the assessment building experience.

Completed

AI problem generation

What we did:

Add AI assistance to automatically create new problems and randomize existing static problems.

Why we think you'll like it:

AI-driven automation can save instructors time making new versions of problems as well as variables, ranges, and solution formulas.

Pause/reset assessment timers for individual students

What we did:

Allow instructors to easily change the timer for an individual student assessment after it has started.

Why we think you'll like it:

Make it easier for instructors to give students more time to complete a timed assessment due to a technical issue or other approved reason.

Reorder problem statements, responses, and choices

What we're did:

Allow instructors to reorder problem statements, response formulas, and choices when editing a problem.

Why we think you'll like it:

Make it faster/easier for instructors to edit existing problems without deleting and recreating fields.

Printing and performance improvements

What we did:

Allow custom spacing between problems when printing an assessment. Optimize performance when working with large problem libraries or publishing and viewing assessments for high enrollment courses.

Why we think you'll like it:

Make it easier to print assessments with space for student worked solutions. Make Variate more responsive.

Student Response Unit Validation

What we did:

Allow students to specify units for numeric responses in a separate input box.

Why we think you'll like it:

Instructors can assess their students' ability to use appropriate units.

Increase support for complex math

What we did:

Configure the Variate math engine to support complex math (imaginary numbers).

Why we think you'll like it:

Complex math will allow for more valid problem instances and a wider support of problem types.

Ordered Multiple Choices

What we did:

Currently Variate automatically randomizes the order of multiple-choice responses. We are going to give instructors the option to keep choices in order.

Why we think you'll like it:

Optionally locking the choice order makes it possible to reference other choices, such as “All of the above”, or “Both A and B”.

Printing assessments with an answer key

What we did:

Allowing instructors to print versions of a Variate Assessment with an answer key.

Why we think you'll like it:

Printed assessments support accommodations with the Disability Resource Center. Other considerations include on-paper exams that are scantron-ready.

Enable alternate response formulas for numeric response problems

What we did:

Allow instructors to configure alternate responses and/or tolerances with partial (or full) percent correct.

Why we think you'll like it:

Students could automatically get credit for making minor mistakes that are common for the type of problem.

Enable alternate response feedback

What we did:

Instructors will be allowed to enter feedback associated with alternate responses and configure exams to optionally show students that feedback on their attempts.

Why we think you'll like it:

Allowing instructors to give feedback associated with alternate responses enables students to learn from their mistakes.

Add support for rich text for input box unit and prefixes

What we did:

Gave instructors more styling options for the unit and prefix.

Why we think you'll like it:

Currently only plain text is supported for input box labels. With this change, instructors will be able to use superscripts, subscripts, and Greek letters.

Assessment read-only preview

What we did:

Added an option for instructors to preview an assessment from the assessment edit page.

Why we think you'll like it:

Sometimes instructors need to view an entire assessment while creating it so that they can identify overall misunderstandings that a student might have.

Respondus LockDown Browser integration

What we did:

Allowed instructors to require Variate assessments to be taken in a locked down browser environment.

Why we think you'll like it:

Instructors may want to keep their students from accessing prohibited materials on the internet while taking a Variate assessment. Students could use their own computers and instructors could still be assured of the academic integrity of the assessment.

Conditional/Boolean logic in formulas

What we did:

Allowed formulas for variables and responses to change their output depending upon if a preset condition evaluates to true or false.

Why we think you'll like it:

Allowing for conditional logic inside of variable and response formulas will allow for more flexibility in creating unique problem instances, as well as allow constraints to be added so that values better represent real-life scenarios or rule out impossible ranges.