



The EvaluateUR Method

Using evaluation to strengthen student skills and support academic self-awareness

About the EvaluateUR Method

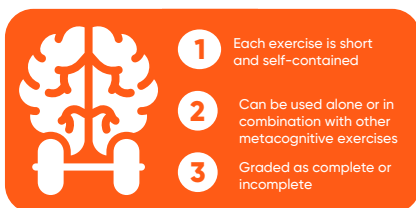
The EvaluateUR Method is used to evaluate programs and experiences in different educational settings including: independent undergraduate research, classroom-based research, internships, and collegiate engineering and engineering technology design competitions. The EvaluateUR Method measures student learning by providing statistically reliable assessments in a wide variety of outcome categories (see outcomes below), including disciplinary and professional skills. Outcome categories and defining components have been mapped to Engineering Technology Accreditation Commission and Engineering Accreditation Commission performance indicators. A unique feature of the EvaluateUR Method is the growth of student academic self-awareness, often called metacognition. The EvaluateUR Method serves as a tool for students, helping them build that awareness and use it to improve their learning.

EvaluateUR Method Outcome Categories



Metcognitive Resources

Exercises



Topics include:

- Learning from past projects
- Developing project management skills
- Thinking about asking good questions/good research questions
- Building resilience/research resilience
- Reading with a purpose/Reading for research
- Better together: teamwork and collaboration
- Building effective communication/Thinking about how you communicate
- Thinking about the assessment process

The EvaluateUR Method includes a set of metacognitive exercises and a deck of cards developed by John Draeger at SUNY Buffalo State University. The short exercises can be done as homework or as a class activity. The cards are designed to enhance performance through fun, metacognitive activities, and improving skills like **critical thinking, communication, and problem-solving.**

Cards



Flow Chart of Steps for All Variants and Options

Within each variant there are options that provide flexibility, allowing for the selection that best aligns with the particular experience. The table (backside of flyer) introduces the EvaluateUR method variants and variant options along with suggestions about when each might be used. For each variant option, a flow chart (example shown below) is available that explains each step and corresponds to the steps found on the dashboard. This resource helps users keep track of deadlines making tracking student progress easier.

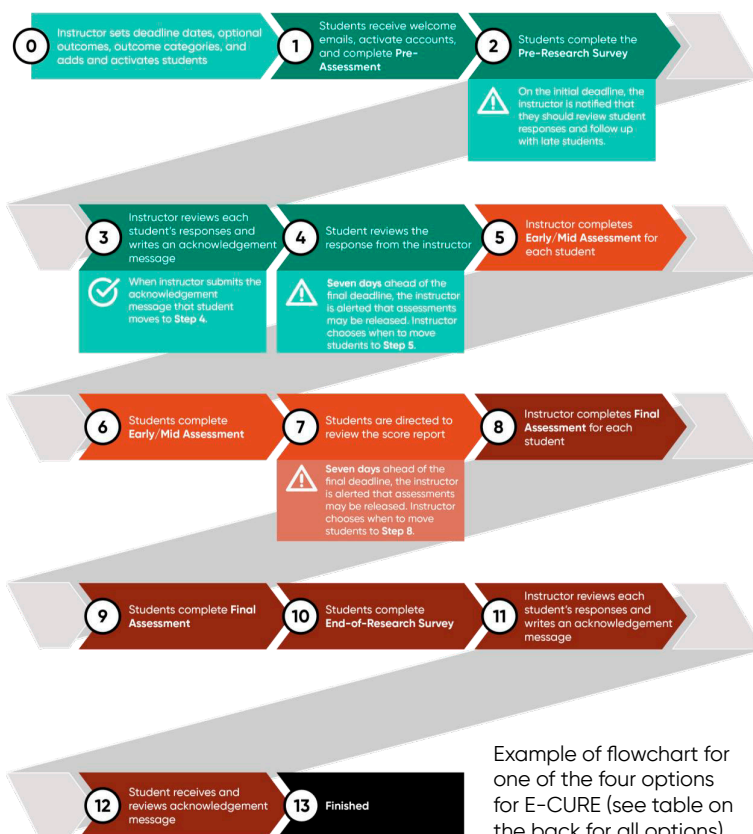
EvaluateUR-CURE

Standard Program Flow



All students move to next step as soon as current one is complete except as otherwise noted.

- Pre-Assessment (Step 1) deadline:
- Early/Mid Assessment (Step 4) deadline:
- End-of-Research Assessment (Step 7) deadline:



Example of flowchart for one of the four options for E-CURE (see table on the back for all options).

NEW Videos!



For students explaining why using the method is beneficial. This video is found halfway down on the page 'For Students'.

For mentors and CURE instructors introducing metacognition and the importance of conversations



Scan this for information about the EvaluateUR Method



EvaluateUR and its variants were developed with support from the NSF WIDER program #1347681 & #1347727 and NSF ATE program #1836033, #1932929, #1932940, and #2325397. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the NSF.

Variant	Intended Experience	Option	Recommended Use & Description
EvaluateUR-Independent Research	Academic year or summer undergraduate research	Standard (Annual subscription)	Student-mentor pairs with frequent interactions between student and mentor. Students complete initial assessment and both students and mentors complete mid-research and end-of-research assessments.
		Student-Only (Annual subscription)	Student self-assessment is primary method of evaluation and only students score initial, mid-, and end-of-research assessments. Useful for larger research programs where mentors are less familiar with research student they are mentoring.
		Small (Free)	Designed for smaller programs where a single individual is mentoring 3 or fewer students. Due to the small number of research students, no summary statistics are provided.
EvaluateUR-CURE	Course-based research experiences	Standard (Free)	One Quarter/Semester CUREs where a research project is the primary activity in the course. CURE instructor selects outcomes categories best aligned with research component. Students score assessments (early, mid-point, and end) and CURE instructor scores mid- and end assessments for each student.
		Extended (Free)	Two Quarter/Semester CUREs where research project is primary activity in both quarters/semesters of course. Similar to E-CURE Standard option but includes additional assessment providing feedback to students in both quarters/semesters.
		Standard Student-Only (Free)	One Quarter/Semester CUREs where instructor-student interaction limited due to large class size, less frequent direct interactions between students and CURE instructor, or any situation where CURE instructor opts not to score students. Scored only by students.
		Short Student-Only (Free)	One Quarter/Semester CURE with shorter duration or smaller-scale research projects. Designed for CUREs where research is partial course component. Due to smaller scale/shorter duration project, only two assessments are scored by students.
EvaluateUR-Project	Engineering technology and engineering design projects	Standard (Free)	One quarter/Semester Projects where students complete initial assessment and both students and project advisors complete mid-project and end-of-project assessments. An extended version is available to support longer duration projects.
		Student-Only (Free)	One quarter/Semester Projects where only students score the assessments. An extended version is available to support longer duration projects.
EvaluateUR-Compete	Team-based competitions (e.g., engineering and engineering technology design, robotics, solar)	Standard (Free)	Assessments scored by both team advisor(s) and students. Intended for teams that have frequent interactions with team advisor(s).
		Student-Only (Free)	Designed for situations with larger teams or teams that work independently with less regular interactions with team advisor(s).
EvaluateUR-Internship	Professional or industry internships	Student-Only (Free)	Student self-assessments to evaluate internship experience, providing insights into their learning and professional development.
EvaluateUR-Student Open Access	Undergraduate research (independent and CUREs), internships, and competitions	Student-Only (Free)	Set up by student to support reflection with tracks for specific high impact experiences.