CQI Capstone Revision Toolkit

A practical guide to turn a strong capstone idea into a focused, feasible, and measurable proposal

Purpose of this toolkit: This toolkit is designed to help students revise their V1 capstone proposal into a clear V2 proposal that meets CQI capstone expectations for scope, research quality, implementation quality, evaluation, timeline, and final deliverables.

Use this toolkit before your 1:1 revision meeting. Please prepare a selected capstone category, one general objective, three to five specific objectives, a draft methodology or educational design, and your main feasibility questions.

What you will build	Why it matters
A clear proposal structure	Helps reviewers understand your project quickly.
SMART objectives	Makes the project **S**pecific, **M**easurable, **A**chievable, **R**elevant, and **T**ime-bound.
Methodology or educational design	Shows exactly what you will do.
Evaluation method	Shows how you will know whether the project worked.
Final deliverables	Defines what you will produce at the end of the capstone.

1. Required V2 Proposal Structure

Use the following structure for your revised proposal. Keep the proposal focused and avoid including large future plans as if they were part of the capstone scope.

Section	What to include	Key question
1. Title	A clear and specific project title.	What is the project about?
2. Capstone category	Select one: Multi-Location Research, Specialized Research, or Community-Focused Educational Project.	Which CQI pathway fits best?
3. Background	Context, technical relevance, and why the topic matters.	Why is this important?
4. Problem / need / research gap	The specific challenge, gap, or opportunity.	What problem are you addressing?
5. General objective	One sentence describing the main purpose of the project.	What will you accomplish?
6. Specific objectives	Three to five concrete steps that support the main objective.	What actions will you complete?
7. Methodology / educational design	Detailed description of how the project will be conducted.	What exactly will you do?
8. Evaluation method	How outcomes, impact, quality, or learning will be assessed.	How will you know it worked?
9. Expected deliverables	Final outputs such as report, SOP, training materials, dataset, or guide.	What will you submit or produce?
10. Timeline	Main activities and dates.	When will each step happen?
11. Risks and mitigation	Possible barriers and how they will be managed.	What could go wrong, and what is the backup plan?
12. References	Technical, scientific, or industry sources supporting the proposal.	What evidence supports your project?

2. SMART (Specific, Measurable, Achievable, Relevant, Tome-bound) Objective Worksheet

Use SMART formulation to improve your general objective and specific objectives.

SMART element	Meaning	Question to ask yourself
Specific	Clear and focused.	What exactly will I do?
Measurable	Can be evaluated with data, evidence, or outputs.	What will show progress or success?
Achievable	Realistic with available time, resources, and access.	Can I complete this during the capstone?
Relevant	Connected to coffee post-harvest processing and CQI goals.	Why does this matter?
Time-bound	Includes a timeframe or deadline.	When will this be completed?

SMART objective (s) Formula: To [action verb] + [what] + [for whom/where] + [how] + [by when] + [how it will be evaluated].

Weak objective	Improved SMART objective
To improve coffee fermentation for farmers.	To design, implement, and evaluate a two-day coffee fermentation workshop for 25 farmers in Doi Musure Village by December 2026, using pre/post learning assessments, practical skills checklists, and sensory evaluation of processed samples.
To study unripe cherries in coffee.	To evaluate the effect of 0%, 10%, 20%, 30%, and 40% unripe cherry content on washed Arabica sensory detectability and cup quality using triangle testing and cupping by [date].

Action Verbs for Objectives

For research projects	For educational / community projects
Compare, evaluate, measure, analyze, determine, identify, correlate, validate	Design, develop, implement, train, assess, document, facilitate, evaluate

3. CQI Capstone Proposal Canvas

Complete this canvas before your 1:1 revision meeting. It is designed to help you organize the project on one page before writing the full V2 proposal.

Canvas box	Student Project
1. Project title	
2. Selected capstone category	
3. Target group / location	
4. Problem, need, or research gap	
5. Why this matters	
6. General objective	
7. Specific objectives	
8. What I will do	
9. What I will measure or evaluate	
10. Final deliverables	
11. Timeline	
12. Main risks	
13. Resources already confirmed	
14. References needed	

4. Evaluation Method Guide

Every capstone must include a way to evaluate outcomes. The evaluation method depends on the project type.

Project type	Useful evaluation methods	Possible success indicators
Specialized research project	Replicates, sensory panel, process measurements, statistical analysis, control vs treatment comparison.	Detectable difference, significant treatment effect, clear threshold, consistent pattern across replicates.
Community-focused educational project	Pre/post survey, quiz, skills checklist, participant feedback, attendance, workshop outputs.	Learning gain, correct use of tools, completion of training, adoption of SOP, positive feedback.
Multi-location research project	Standardized protocol across locations, site comparison, consolidated data, repeated measures.	Comparable data across locations, clear regional differences or common patterns, consolidated recommendations.

5. Deliverables Builder

Activities are what you do. Deliverables are what you produce. Your V2 proposal must clearly list the final outputs.

Activity	Deliverable
Conduct a workshop	Workshop agenda, slides, attendance record, training materials, participant feedback summary.
Test fermentation treatments	Experimental matrix, monitoring data, sensory results, final analysis report.
Develop SOPs	Written SOP, monitoring sheet, implementation notes, recommendations.
Run sensory evaluation	Cupping protocol, panel information, sensory dataset, results summary.
Conduct literature review	Short technical background integrated into the proposal with references.

6. Timeline and Risk Planning

Phase	Main activity	Target date	Evidence / output
Phase 1	Finalize V2 proposal and approval		Approved proposal
Phase 2	Prepare materials, protocol, or tools		Materials/protocol ready
Phase 3	Implement research, workshop, or pilot		Data, attendance, records, samples
Phase 4	Analyze results and evaluate impact		Analysis/evaluation summary
Phase 5	Write final report and recommendations		Final capstone submission

Use this risk table to make your proposal more realistic.

Risk	Why it matters	Mitigation plan
Harvest timing changes	Samples or workshop may be delayed.	Identify alternative dates or backup sample source.
Limited laboratory access	Chemical analysis may not be possible.	Use feasible process and sensory measurements.
Low participant attendance	Educational impact may be limited.	Confirm participants early and use local partners.
Too many treatments or locations	Project may become unmanageable.	Reduce scope to the most important comparison or pilot.
Unclear evaluation method	Cannot demonstrate impact.	Define pre/post assessment, sensory protocol, or statistical plan before starting.

7. V2 Self-Checklist Before Submission

Check	Question
☐	I selected only one capstone category.
☐	My title is specific and clear.
☐	My problem statement explains why the topic matters.
☐	I have one general objective.
☐	I have three to five specific objectives.
☐	My objectives are SMART.
☐	I explain exactly what I will do.
☐	I identify who or what will be involved.
☐	I define how results, learning, or impact will be evaluated.
☐	I list final deliverables.
☐	I include a realistic timeline.
☐	I identify risks and mitigation strategies.
☐	I include references and use them to support the proposal.
☐	The project can be completed within the capstone timeline.

8. Frequently Asked Questions

A. **Do I need to solve a big industry problem?**
No. A good capstone should be focused, realistic, and useful. A small, well-executed project is stronger than a large project that cannot be completed.

B. **How many objectives should I include?**
Usually one general objective and three to five specific objectives.

C. **What is the difference between an activity and a deliverable?**
An activity is something you do. A deliverable is something you produce. For example, conducting a workshop is an activity; the curriculum, attendance record, pre/post survey results, and final report are deliverables.

D. **Do educational projects need data?**
Yes. Educational projects should include evidence of impact, such as surveys, quizzes, skills checklists, feedback forms, or adoption records.

E. **Do research projects need replication?**
Yes, whenever possible. Research projects need enough replication or repeated observations to support conclusions.

F. **Can my project include several countries or communities?**
Only if the scope is realistic and the comparison is clearly defined. For most capstones, one well-defined pilot is stronger.

G. **What if I do not have access to lab analysis?**
That is acceptable. Focus on feasible measurements such as pH, Brix, time, temperature, moisture, water activity if available, sensory evaluation, and documented observations.

H. **What should I bring to the 1:1 meeting?**
Bring your selected capstone category, draft general objective, draft specific objectives, methodology or educational design, and main feasibility questions