## Suggested Checklist for Developing an Evaluation for the Course Curriculum and Laboratory Improvement Program (CCLI)

Α.	A. Project Description				
$\checkmark$					
	1.	What are the purpose, goals and objectives of the project?			
		Are the goals and objectives realistic, given the exploratory nature and duration of Phase I research projects?			
	2.	What is the intervention, product, or process that is being examined and/or developed?			
		How much exposure will participants have to the materials, equipment, or services during the project?			
	3.	Who will be participating in the research (institutions, faculty, and students)?			
В.	Eva	aluation Overview			
	4.	What purposes will the evaluation serve?			
		To provide formative feedback on project design and usability of products to inform project refinements?			
		To describe initial implementation efforts and challenges?			
		To monitor the status of project milestones?			
		To collect data and evidence on the success of the project?			
		To collect evidence of feasibility of the project in support of a Phase II proposal submission?			
	5.	Are the evaluation questions clearly stated?			
		Are the questions aligned with the goals of the project and the purposes of the evaluation?			
		Will the questions posed satisfy project stakeholders?			
		Are the questions realistic and testable?			
		Can the questions be addressed within the time frame of the project?			
		Can the questions be addressed, given the availability of data sources, measures, and instrumentation?			
		Can the questions be addressed, given the constraints on available evaluation design options?			
	6.	Has the evaluators' credibility been described?			
		Are the evaluators' resumes included?			
С.	Eva	aluation Design			
	7.	Have the evaluation methodologies been adequately described?			
		Do the proposed methodologies (design elements, data collection strategies, instrumentation) adequately address each of the			
		evaluation questions?			



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8.	Who are the participants (faculty, students, and institutions)?
	How many participants will be involved in the evaluation? (Include approximate number of participants from whom data
	will be collected.)
	How were the participants selected (e.g., volunteers, all faculty in a department, students enrolled in course, selection of
	information-rich cases)?
9.	How will implementation of the use of products or services be monitored?
	(This is not about measuring fidelity of implementation but rather about identifying barriers to implementation.)
10.	. How will project outcomes be evaluated?
	Does the research design adequately address each of the outcome-related evaluation questions?
	Is the research design identified and adequately described (e.g., case study, quasi-experiment, experiment)?
	If a single-group design is proposed (e.g., case study, pre-post single group)
	Have you anticipated the possibility of the presence of confounding factors that may lead to alternative explanations for
	the outcome results? (These may include preexisting characteristics of faculty and students, preexisting trends in the
	outcome measures, and other coursework or events that may be coincident with the project and may affect the outcome
	measures in similar ways.)
	If a two-group comparison design is proposed (quasi-experiment or experiment)
	How were the participants assigned to the different conditions or groups (e.g., matched on prior grades, participants self-
	selected into groups, random assignment)?
	How will the pre-project comparability of the groups be assessed?
11.	. Have the data collection instruments been adequately described?
	Will data collection instruments be used and who will develop them(e.g., surveys, interview protocols, learning
	assessments)?
	Use of established instruments with no modification?
	Use of established instruments adapted to the project's purpose?
	Use of newly developed instruments created for this project?
	If established instruments will be used
	Is there published information on the reliability and validity of the measures?
	If the evaluators are adapting or developing new instruments
	Will the instruments be piloted?



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	Will the reliability and validity of measures be assessed?
	How will data be collected on participants' relevant background characteristics (e.g., age, prior achievement, training, academic history)?
	12. Have the data collection procedures and schedule been adequately described?
	Will administrative records be used and has the collection procedure been described (e.g., grades, retention, graduation rates)?
	When will the different data collection activities occur?
	Will the procedures result in the reliable collection of data?
	Will the procedures result in high response rates?
D.	Data Analysis Plan
	13. Is the analysis plan aligned with the evaluation questions, instrumentation, and data collection procedures?
	If proposing inferential statistical analyses
	Are the statistical methods and procedures identified (e.g., factor analysis, multiple regression, ANOVA, hierarchical linear regression, nonparametric techniques)?
	Is the size of the sample sufficient to attain an adequate level of statistical significance?
	If proposing qualitative analyses
	Are the coding, interpretation, and synthesis of qualitative data adequately described (e.g., results from focus groups, interviews, unstructured observations, ethnographies)?
	If proposing mixed-methods designs
	Is the integration of results from qualitative and quantitative data analyses adequately described?
	14. How will the design or analysis address the influence of confounding factors on outcomes (e.g., differences in motivation between groups, influence of other coursework on outcomes)?

