Appendix A - Teaching-As-Research proposal instructions

As part of the application process, the intern should submit a brief proposal outlining the internship experience. Section I of the proposal should be jointly developed by the intern and partner; the entire proposal should be written by the intern. It should be no more than 5 single-spaced pages in length (12 pt font) and should include the following items:

SECTION I: PROJECT DESIGN
1. Provide a description of the classroom or informal science education-related issue/challenge you are addressing.
2. What is your Teaching-As-Research question?
3. What is your hypothesis? (It should be based on the literature cited, and framed around the relationship of evidence-based and inclusive instructional practices and the accomplishment of learning goals.
4. What is known (in the literature) about this learning issue?
   a. What have others tried? What has worked, and what hasn’t?
   b. In your project, how will you build on what is known about the issue?
5. Describe your planned approach
   a. What undergraduate or graduate course will be impacted by your project (include course #; e.g., Biomechanical Engineering (BME) 545)?
      i. On average, how many students are in the course?
   b. Identify your desired learning goals and outcomes. What will students/participants be able to know, value and do (knowledge, attitudes and skills) as a result of your intervention? (Learning outcomes should be well-defined, achievable, measurable, and student-centered.
      i. Explain how the learning outcomes are aligned with the project assessments and activities.
   c. Evaluation. Describe how students/participants will demonstrate what they know, value and can do.
      i. What assessment techniques/approaches will you use? Explain (justify) your choice of assessment approaches.
      ii. How will you collect the data? (e.g., survey)
      iii. How will you analyze the data? (e.g., qualitative analysis)
      iv. Explain how the assessment approach effectively addresses the research hypothesis.
   d. What instructional strategies, resources and learning experiences will you use to help students/participants reach your learning goals and outcomes?
6. Integrating the Delta pillars.
   a. Provide examples of specific teaching & learning approaches & activities that you plan to use to develop and use learning communities to promote learning in your project.
      i. Provide a clear rationale for including (or not including) Learning Community elements in the project.
      ii. Describe how these Learning Community ideas fit with the project’s design, implementation and analysis.
   b. Provide examples of specific teaching & learning approaches & activities that you plan to use to engage participant diversity to promote learning.
      i. Provide a clear rationale for including (or not including) Learning through Diversity elements in the project.
      ii. Describe how these Learning through Diversity ideas fit with the project’s design, implementation and analysis.
7. Project logistics:
   a. What roles and responsibilities will both you and your partner have in the project?
   b. Provide a proposed timeline for project activities

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**Delta Pre-internship workshop**

SECTION II - PERSONAL
1. What are your previous teaching experiences?
2. What are your current career aspirations?
3. What do you hope to gain from the internship experience that will advance you toward your career goal(s)?

SECTION III – CONCEPTUAL UNDERSTANDING
1. What is your understanding of each of the three terms below AND how would you use each concept to improve learning?
   a. Teaching-As-Research
   b. Learning-through-Diversity
   c. Learning Communities
2. How have you developed your understanding of diversity? Please provide an example.