

Continuous Improvement of Instruction through Curriculum Development

Professional Learning Program
Innovative Curriculum Resources Project

This program introduces teachers to the 5-Phase Teaching Cycle and the 5E Learning Cycle so that teachers can use these processes to improve their curriculum and pedagogy to better meet the needs of contemporary students.

9:00 am-3:00 pm

Time	What	Comments
9:00-9:15	Introductions	Leaders, facilities, each person at the table, etc.
9:15-10:10	Experiencing the Learning Cycle Model	<p>Work in pairs to complete the “Fly by Wire” lesson that teaches how to solder wires together in a constructivist learning cycle format.</p> <p>When finished, discuss the following questions.</p> <ol style="list-style-type: none"> 1. What objectives and standards did this lesson address? 2. Was this lesson effective? 3. How did this lesson differ from a traditional lesson format? <p>Provide the descriptors of each section of the 5E model.</p> <p>Share and discuss the Practical Lesson Writing Guide template that was used to develop this lesson. Highlight the utilization of the backwards design process.</p>
10:10-10:30	Explanation of lesson selection within the 5 Phase model.	Explain the origins of the topics that will be addressed by the new lessons that the teachers will be writing. This will introduce Phase I and II of the 5 Phase Professional Teaching Cycle. The teachers will be doing Phase III today by working through the Practical Lesson Writing Guide (PLWG) template.
10:30-10:40	Break	The writers should sit at the tables designated for each topic after the break.
10:40-11:25	Complete cover page including	Teachers will start on the cover page (boxes 1-8 of the PLWG template). This will include writing what the student should

	the Evaluation section	<p>learn (objectives). A handout of verbs aligned to Blooms Taxonomy will be helpful.</p> <p>After reviewing the template, briefly discuss why we are doing the evaluation section (E #5) before doing anything else. Discuss the rationale for the backwards design structure. Use a variety of assessment techniques but be sure they align to the objectives.</p>
11:25-11:30	Report	Several groups will be asked to report on their objectives and evaluation.
11:30-11:55	Phase III: Engage	Teachers will write the Engage section (box 9). Refer to the 5E Descriptors sheet handed out earlier. Also, this short activity should be aligned to why this topic is important. The instructions should be in numbered steps to the student with comments to the teacher.
11:55-Noon		Several groups will be asked to report on their objectives and evaluation.
12:00-12:30	Lunch	Use this time to share other opportunities for students and teachers available through the ILCTE group.
12:30-1:15	Phase III: Explore	Teachers will write the Explore section (box 10). This will be challenging since this section is the essence of the break from traditional instructional strategies. This <u>MUST</u> be an activity consistent with the 5E Descriptors where students explore the topic and discover the concepts. It cannot be direct instruction (teacher talking/telling).
1:15-1:20	Report	Several groups will be called upon to report their Exploration activity.
1:20-1:50	Phase III: Explain	As teachers write the Explain section (box 11), there may be some confusion. The main difference between traditional instruction and the learning cycle is <u>who does the explaining</u> . It is natural to think that the teacher should be explaining the concepts. If the Explore activity is effective, the <u>students</u> should be doing the explaining. This section consists of a series of questions.
1:50-1:55	Report	A few groups will be called upon to report their Explain section questions.
1:55-2:05	Break	

2:05-2:35	Phase III: Elaborate/Expand	This section of the instructional process is seldom done in traditional pedagogy. As teachers write the Elaborate/Extend section (box 12) they will start with “real world” applications and develop an activity that ties the concept/skill that was just learned to it.
2:35-2:40	Report	A few groups will be called upon to report their Elaboration/Extension activities.
2:40	Discussion of Phases IV and V Program Evaluation	Describe and explain <i>Phase IV: Implement New Learning</i> and <i>Phase V: Monitor, Assess, and Adjust Practice</i> . Also included in this discuss will be the intended activities over the next few months to support these lessons and write more. Complete the program evaluations.
3:00	Adjourn	