ECI 518, Unit 2 Project James Hardaway
Option 4: Synthesize a digital-age instructional framework

Framework Description: *Teaching Inquiry through Problem-Based Learning*

The instructional framework presented below rests on employing learning networks to enable discovery. At the heart is a constructivist learning environment comprised of conditions that promote a student's self-awareness, collaboration, and ownership of educational goals. Students must recognize and commit to their role in the process to grow in a direction that aligns with their values and interests. This framework draws from ideas in both the framework for "Gold Standard Project Based Learning" and the "Connected Learning Framework" in our reading. The conditions critical to enabling success are described as follows:

- **Self-awareness** of knowledge construction. This reflexivity enables students to build and explore new learning constructs as they become comfortable with their internal learning mechanisms. Such skills are critical to transferring knowledge from simple to more complex applications.

- **Ownership** in learning. Student-centric teaching in this model refers not just to the focus of the instructional methods, but also to the responsibility the learner has in managing how their learning needs will be met. This requires some trust on the part of the instructor and some students may not be as ready. In this case, instructional aides may be necessary to help guide students as opposed to letting them operate autonomously. Key is to acknowledge the learner as a key responsible party in the communal relationship.

- **Complex, relevant** learning scenarios. Increasing problem complexity is another condition that reinforces knowledge transfer, while building self-confidence as learners gain understanding of new concepts. Real-world applications rarely present themselves in a way that matches classroom or laboratory examples. Adding realistic context allows students to experience multiple concepts converging in a single learning event. These events give teachers the opportunity to build upon previous learning through scaffolding and anchoring exercises as well.

- **Multiple modalities** to challenge preferences. Viewing content through the lenses of different senses or multiple perspectives affords learners competing narratives about their subject matter. Not only will these alternative views reveal previously unseen aspects, but they present an opportunity to challenge or critique what they knew from singular representations. Questioning previous knowledge is a key step in maturing internalized learning techniques.

- **Collaboration** to foster teamwork and communication. Solving problems in a team setting requires effective social skills to negotiate solutions. Rarely will a single student have all the answers, nor will the entire team agree on all paths to a final solution. These

realities require learners to develop and leverage social capital, leadership skills, and bargaining. While helpful in the classroom, these talents are essential in the professional world.

The model can be visualized as a personal learning network integrating 4 communities around the learner: