Proposed Key Pedagogies of the GE Curriculum

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Introduction

In this document, we present the three signature pedagogies guiding the revision of the GE Curriculum. They were chosen for their potential to engage students in rich learning experiences that prepare them for success in college.

The first, “Engaging Students’ Knowledge,” encourages faculty to identify students’ socio-cultural and subject matter knowledge and use it in their teaching. The second, “Inquiry-based Learning,” models how to place questions and investigations at the center of teaching and how to lead students in seeking to answer those questions. And the final pedagogical approach, “Experiential Learning,” demonstrates how faculty may build hands-on experiences into teaching, both inside and outside classroom, to help students see the connections between their new academic knowledge and the “real world”.

While these three pedagogical approaches are presented separately in this document, there are powerful connections between them. All three emphasize the importance of *reflection*. When students reflect on their learning, they can identify what they know and need to know about a subject, helping them to take agency over their learning. Furthermore, such reflection fosters students’ *metacognition*, “the ability to monitor one’s current level of understanding” (NRC, 2001, p.47), which is a critical capacity for future learning. Furthermore, through these three pedagogical approaches emphasizing students’ agency and centering their interests, they aim to increase students’ sense of belonging and connection, thus increasing their likelihood of persisting at Kean. And lastly, they all emphasize the importance of the connection between “academic knowledge” and the “real” world. By honoring and engaging the knowledge that students bring with them to college these pedagogies seek to enable students to feel the importance of their learning and to apply it in their lives. By situating courses in specific *places*, and leading them in forming questions about those places, we hope to prepare students to ask questions wherever they go in the world.

Engaging Students' Knowledge

Engaging students' knowledge is a pedagogical approach that recognizes the importance of supporting students in recognizing the connections between their prior, socio-cultural based knowledge and the subject matter that they are learning in college. It recognizes that college students bring with them valuable knowledge from their families, cultures and prior educational experiences. When teachers identify and engage that knowledge in teaching subject matter, it supports students' learning. This pedagogy draws from two central insights from the learning sciences.

One, learning occurs when learners (students) connect to and build on what they already know. Studies of learning across the lifespan, from babies to adults, have shown that "people construct new knowledge and understandings based on what they already know and believe" (NRC, 2000, p.10). The opposite is also true: people struggle to learn new concepts when those concepts don't align with what they already know. This indicates the importance of teachers identifying students' prior knowledge of subject matter, including the misconceptions that can block students' learning.

And two, students come to college with rich "Funds of Knowledge" which include both "families' sociocultural, linguistic, and intellectual resources" (Rios-Aguilae & Kiyama, p.3), and the often associated "practices that are shared in the homes of students and their families" (García, p.5). This research shows that there can be connections between students' cultural knowledge and the subject matter of courses. When faculty learn about their students' funds of knowledge and engage it in the classroom, they deepen both their students' learning and sense of belonging.

Ways to engage students' knowledge:

- Create space in the classroom for students to share their prior experiences and understandings that may connect with subject matter. For example, a geology teacher might begin a course by asking students about the regions of the world they have lived in and elicit from them their observations about the geology of those spaces. The faculty member can then return students' observations across the course, using students' direct experiences of geological phenomena to ground their inquiry.

- During classroom discussions, ask students questions that might prompt them to make connections between their prior knowledge and course subject matter. For example: Where have you seen this before? How can you relate this concept to something you already know? What does this remind you of?

- Lead students in reflecting on the connections or disconnections between course topics and their experiences. Students might engage in reflection individually through a quick freewrite, within pairs with a classmate or within an all class discussion. As students identify connections and disconnections, ask questions to lead them in examining topics by using their prior knowledge.

- Create assignments where students can present their experiences outside of the classroom and hold those experiences up to subject matter. For example, an economics teacher may have students observe economic principles in their community and analyze government responses based on what they have observed.

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Inquiry-based Learning

Inquiry-based learning is based on the idea that everyone–from young children to adult learners–have questions about the world and that learning is motivated by answering those questions. While it can take many forms within different disciplines, at the center is faculty supporting students in forming and responding to questions. In order to support students' learning through inquiry, educators have developed models of how to structure the inquiry process to support students' learning (See figure 1).

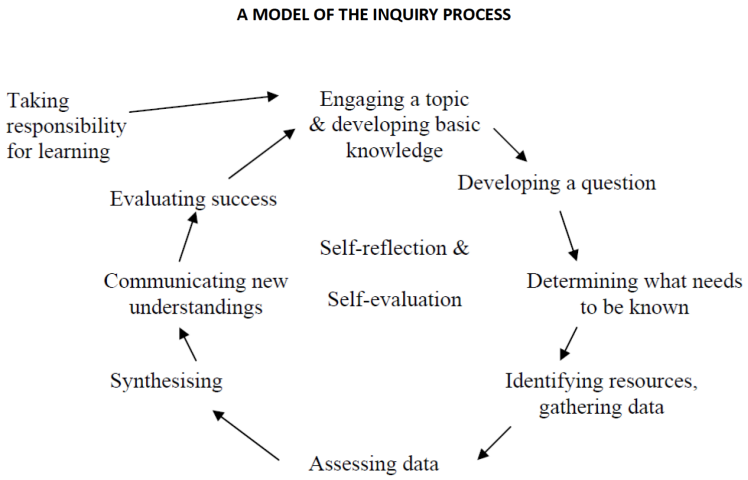

FIGURE 1: *Model of the inquiry process (Justice et al., 2002:19).*

While there are variations on this model, the essential elements are that the inquiry process include: (1) identifying topics; (2) developing questions about those topics; (3) identifying and engaging in a process to address those questions; (4) reaching a response or set of responses; and, (5) communicating answers and new questions. These steps may occur within a single classroom meeting or across an entire semester. What is essential is that as students move through the inquiry process, faculty provide scaffolded support to guide the inquiry and that students engage in reflection on both what they are learning and the processes of learning. This supports students' development of metacognition, the ability to reflect on and guide their own learning.

Ways to lead students in inquiry-based learning:

- When presenting a new unit, spend time forming questions with students about that topic. As you move through the unit, return to those questions to refine them or generate new questions. You can use these questions in creating

assignments, helping students to connect their in-class learning and independent work.

- Structure assignments to follow the inquiry process, providing scaffolds that support students' learning. These scaffolds may include individual or group meetings, additional resources or feedback on the project as it progresses. To support students' metacognition, talk to them to identify the help they need.

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Experiential Learning

“I hear and I forget. I see and I remember. I do and I understand”- Confucious

Experiential learning is based on the observation that a key way people learn is by doing. Applied to education, the theory of experiential learning offers a framework through which teachers can structure novel learning experiences to encourage students to reflect and experiment while engaging in hands-on learning.

Current models of experiential learning are based on the work of Kolb, who identified four stages within a cycle of experiential learning: (a) concrete experience, (b) reflecting on an experience, (c) learning from the experience, and (d) experimentation with the experience (Wijnen-Meijer et al, 2022) (see Figure 2.) As depicted in the figure below, the process of experiential learning can be cyclical as students move continually between concrete experiences and more abstract knowledge, with their learning deepening within each stage. Research suggests that experiential learning helps students to bridge the gaps between academic knowledge and real world experiences, which may help to increase clarity about academic goals and career interests (Chan, 2022).

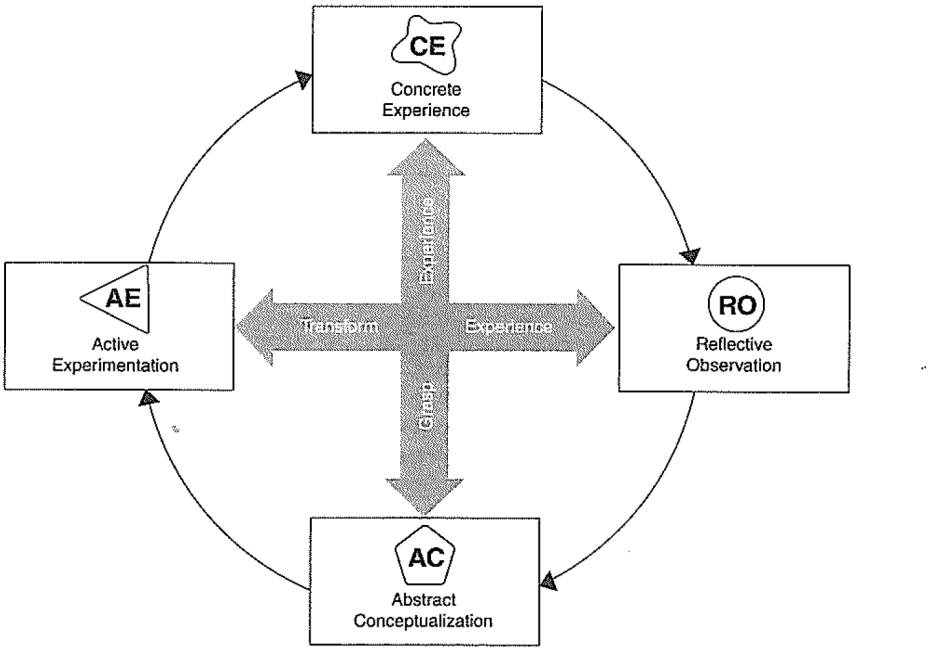

Figure 2: Kolb’s Experiential Learning Cycle.

Ways to engage students in experiential learning:

- Identify ways in which your subject matter “shows up” in the world, and lead students through those real world experiences inside or outside of the classroom. For example, a sociology professor may lead students on a neighborhood walk to study social stratification or a statistics professor may lead students in analyzing census data.

- Make space for reflection throughout the experiential learning process; prior to, during and after. That reflection can be done individually or in a group format. Reflections can be highly structured using specific prompts, or it can take the form of a free written response through the use of journaling.

- In experiential learning, instructors serve as a facilitator, guiding students through new experiences. The instructor should strive to create a non-judgemental space where students feel comfortable taking risks and making mistakes while experimenting with the application of new concepts.

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