Inquiry-Based Learning: A Powerful Approach to Facilitating Learning in Any Discipline

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Inquiry-Based Learning (IBL) is increasingly advocated as an approach to learning that helps students bridge the gap between their life as university students and their present experiences outside school as well as their future as employees' productive members of the 21st century workplace. IBL is an umbrella term used to describe "an array of classroom practices that promote student learning through guided and, increasingly, independent investigation of complex questions and problems, often for which there is no single answer" (Lee, 2004, p.9). In the process, students learn to formulate appropriate questions, identify problems, explore resources, examine alternative solutions or hypotheses, find and evaluate evidence, choose among solutions, and communicate results and conclusions (Lee, 2004). By engaging in IBL over a longer period of time, students are expected to develop life-long learning attitudes and skills such as critical thinking, problem-solving, effective communication, creativity, adaptive expertise, pro-activity, risk-taking, and a tolerance to ambiguity (Association of American Colleges and Universities, 2004; Lee, 2004).

Like many instructors, IBL might seem like a dramatic shift from what you are currently doing in your classrooms. However, that should not deter you from trying it out. IBL is not an all or nothing approach to teaching. Any learning activity that encourages student inquiry falls somewhere on the IBL continuum. Interactive lectures, problem-solving, group discussions, and research projects are all examples of IBL. However, a class lecture in which you are the only participant would not qualify (Lee, 2004). Think of IBL integration as an evolutionary process. Start small and finish big. Below are some guidelines to help you adopt a more inquired-inspired approach in your classroom (Duffy, 2002; Kahn & O'Rourke, 2005):

1. **Select topics of interest and relevance to the students**. Goals and needs influence how learners process information and what knowledge they construct (Duffy, 2002). It is thus important to identify students' general interests and goals for the class and find ways to incorporate these in the learning activities you design.

2. **Build on existing knowledge and skills**. It is vital to acknowledge that students' knowledge and experience add value to the class. Encourage learners to voice what they know; allow them to discover how it interacts and conflicts with new information/experiences. This becomes an excellent opportunity for instructors to diagnose students' misconceptions and scaffold students in addressing them.

3. **Help students indentify new learning and information needs**. Instead of informing students of the information they need to answer their inquiries, ask them to brainstorm what knowledge and skills they need to build in order to solve their queries. At this point, you might provide feedback on their choices as well as guidance as to how to address those needs.

4. **Encourage students to explore a variety of resources and evidence**. Encourage students to identify and use the various formal and informal resources they might find useful to answer their inquiries in their environment: peers, the library, the Internet, yourself, their experiences, etc.

5. **Scaffold students in evaluating resources and evidence**. A valuable component of the process is evaluating resources and evidence. We are not doing students any service by giving them the impression that all ideas and data are equally valid. Help students learn how to evaluate resources and the evidence they use for its credibility and relevance.

6. **Prompt students to reflect on their learning experiences.** For students to become life-long learners, they need to understand how they scaffold and evaluate their own learning as well as that of others. Encourage students to analyze their learning processes and products, as well as the contributions of peers and yourself (the instructor) to their experiences.

7. **Foster a classroom culture in which inquiry is promoted**. It is often shocking to ask students to suddenly have a voice, think critically and creatively in class in which they are generally encouraged to be passive. Foster a culture of trust in which students' ideas and knowledge are respected, yet evaluated. Start with yourself by modeling openness to inquiry.

Finally, during the workshops I conducted about IBL for CLT this spring, I noticed that AUC instructors of varied disciplines are skeptical of the applicability of inquiry-based learning to their particular area. Learning through inquiry is a universal human phenomenon. As such, the general guidelines for IBL outlined above are expected to hold for any discipline. However, we can expect differences to emerge from variances in the nature of inquiry across disciplines. Experts in different fields often vary in how they frame their inquiries, in the tools and methods they use to investigate their questions, in the resources they explore, and in their perception of what constitutes good evidence. These differences should be acknowledged and advocated by instructors facilitating learning in their respective disciplines to help the learners bridge the gap between themselves as novice inquirers in a particular discipline and the experts that we hope they would soon become – should that align with their goals and needs!

Sources
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