

Decoding the Disciplines: A tool for inviting first generation college students into academic disciplines

Every year throughout the world first generation college students find themselves completely unable to adjust to the demands of the courses they are taking. Unaware of the mental operations that are required in a field, they fall back on generic techniques of learning that are quite inappropriate for the challenges they face. Their instructors attempt to help them master the mental processes required in the discipline, but these are often so automatic to these experts that they unconsciously omit some of the most essential steps that students must master. The result is a much too often a disaster for the student and a loss to society.

College instructors, professionals in teaching centers, and SoTL practitioners in the United States, Canada, Ireland, the U.K., Sweden, Norway, Germany, Belgium, South Africa, and Australia are now using the Decoding the Disciplines approach to respond to this challenge. Beginning by defining crucial bottlenecks to student learning, they systematically make explicit the kinds of mental operations that are required to get passed these obstacles, model these for students, and assess student mastery of specific skills.

In this workshop the co-founders of Decoding the Disciplines will present the basics of this paradigm, and explore how it can be used. As an example of this process, participants will see how students first arriving in college were taken through a ten-day course in which they were systematically introduced to the mental operations, required in a particular discipline (history). The strategies used in the course will be briefly shared, as will examples of assessments and short video tapes of students describing how the experience changed their understanding of what required for college work.

The majority of the workshop will be devoted to hands-on work in which the Decoding paradigm will be applied to particular disciplines of concern to the participants, with emphasis on easing the transition of first-generation college students into the world of higher education. Crucial bottlenecks to learning in each discipline will be identified, and participants will have an opportunity to participate in an interview process designed to make explicit the mental operations that students must master to overcome one of these obstacles. Then they will brainstorm how these steps can be modeled for students and assessed.

Participants should emerge from this workshop with ideas for using Decoding in SoTL research. Instructors will have gained new tools for drawing larger numbers of their students into the learning processes of their disciplines, and professionals from teaching centers will have new strategies for helping faculty.

David Pace and Joan Middendorf, *Decoding the Disciplines: Helping Students Learn Disciplinary Ways of Thinking* (New Directions in Teaching and Learning, Vol. 98 (Fall 2004))

Arlene Díaz, Joan Middendorf, David Pace, and Leah Shopkow, "The History Learning Project 'Decodes' a Discipline" in Kathleen McKinney, Ebbs, Flows, and Rips: *The Scholarship of Teaching and Learning In and Across the Disciplines* (Indiana University Press, 2013)