

Strategies for Covering Content Series

PART 2: Covering content through non-lecture activities

In her article, Oliver-Hoyo points out that "presenting information does not necessarily translate into students' understanding" (p. 35). Instead, she advocates for reducing the quantity of content covered, so that students can engage in key course concepts at a deeper level. This contention has been corroborated by Luckie et al. (2012), who found that students in biology laboratory courses with less traditional content coverage but more inquiry-based learning tended to score higher on content exams than students in classes with less inquiry.

Inquiry-based learning

Nilson (2010) defines inquiry-based learning as "giving students a challenge, such as a question, a hypothesis, or simply data to interpret, and they learn whatever they must to meet that challenge, which may or may not go beyond the course material" (p. 176). Research suggests that inquiry-based learning promotes higher-level thinking in students, including critical thinking and problem-solving skills (Nilson, 2010), and can improve students acquisition of course content (Luckie et al., 2012). Additionally, Engle & Tinto (2008) suggest that incorporating more active, cooperative, and problem-based learning activities that "require students to become more involved in the learning process," (p. 25) can be one way to promote success for diverse learners, and for low-income, first-generation college students. Below are a few suggestions for how to incorporate guided extended-learning activities into the classroom. These activities should be scaffolded, otherwise they might become frustrating, insurmountable learning tasks for some students.

| Strategies | Activities & Descriptions |
|------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Consider common modes or objects of inquiry from the field | <u>Field-Based Investigations:</u> You could design activities (or a project) where students must investigate a phenomenon of interest, a controversy, or a problem currently impacting the field. Then, break up the object of inquiry into several mini-assignments that are scaffolded in complexity (from easier to more complex) over the quarter, so that the tasks are more manageable for students. |
| Implement "authentic" writing assignments | <u>Authentic Writing Projects:</u> Anderson, Hoffman, & Little (2014) define "authentic" writing assignments as asking students to practice the types writing and thinking professionals in their discipline actually engage in. Authentic writing projects can give students a chance to see what writing and inquiry looks like in their own disciplines while providing them with an opportunity to write to a realistic audience. |
| Implement problem- based learning | Case study: In teams, students are given a case study describing a real world and/or field-related problem. Each team must then develop a solution to the problem, using course concepts, outside research, etc. |
| | Group Investigation: In groups, students plan, conduct, and report on an indepth research project that is topically related to the course, though not covered by the instructor. This type of project allows students to dig into a particular topic, and gain more specialized knowledge in that particular area. For step-by-step instructions on how to design a problem-based activity, see this article from Faculty Focus. |

Writing-to-learn activities

Writing-to-learn activities involve using writing to help students understand course concepts and content. Herrington (1981) argues that these activities can be particularly helpful in exposing students to disciplinary ways of writing/thinking, and push students to be active participants in their own learning. Similarly,

research suggests that writing-to-learn activities can promote students' learning of content, performance on content exams, and engagement in the course (Bean, 2011; Drabick et al., 2007; Reynolds et al., 2011). Writing-to-learn activities range in size and intensity; from longer research-based projects to short in-class discovery writing.

| Shorter Assignments | Longer Assignments |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| Free Writes: Short, ungraded, in-class exploratory writing activities meant to get students engaged in a course topic. | Inquiry/Problem-Based: Students are asked to research and investigate a current issue or problem facing the field. |
| Reading or Concept Responses: Student must write a response on an online discussion board responding to specific readings or course concepts. Instructors should provide guiding questions for these responses. | Compare/Contrast Analysis: Students are given a series of opposing readings, and must compare/contrast how and why the scholars' perspectives differ. |
| Lecture Summaries: Students are asked to write a short summary of a class lecture. This activity can be done in or out of class. | Position Papers: Students are asked to research and support a specific position on a controversy impacting the field. |

Additional resources:

For more strategies and suggestions on designing and implementing writing-to-learn activities, see our resource series titled "Designing Effective Writing Assignments."

Citation

Center for Educational Effectiveness [CEE]. (2018). Strategies for Covering Content Series. *Just-in-Time Teaching Resources*. Retrieved from https://cee.ucdavis.edu/JITT

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