

# Beyond Learning to Write and Writing To Learn: Developing Engineers Through Integrated Content and Language Teaching

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## **Abstract**

One way to examine the integration of writing into disciplinary courses is through the two poles of writing to learn and learning to write. At one pole, writing to learn typically focuses on informal, reflective writing assignments that help students engage more deeply with disciplinary content; at the other, learning to write focuses on the formal genres and rhetorical structures characteristic of disciplinary practice. Over the last three decades or more, scholars and practitioners have made strong gains in understanding and enacting both approaches. But between these poles sits the work of academic and disciplinary literacy theorists who turn our attention to the ways in which writing is an epistemological practice. Their work reminds us that learning to write within a given domain is as much the process of mastering ways of thinking and doing as mastering ways of structuring and formatting. This framework pushes us, as researchers and as educators, to understand more deeply the specific epistemologies embedded in the writing practices of the disciplines we work with, and in turn to consider how the writing assignments we design can better support students' epistemological development. To this end, I draw on my own research from more than two decades in engineering programs, as well as the work of scholars around the world, to unpack the relationship between *writing about* engineering work and *doing* engineering work. What characteristic engineering practices are embedded in the texts students and practitioners produce? How can these practices help us understand what students learn about engineering while they develop as writers? The answers to such questions can and should inform the kinds of writing assignments we design, the ways we work with disciplinary faculty, and the kinds of scaffolding and feedback we provide for students. Equally important, the work I and others have done in one discipline, engineering, can and should prompt us to explore such questions in the full range of disciplines where writing scholars and educators work. This talk calls all of us to engage in the challenging intellectual and practical work of writing in, with, and through the disciplines where our students learn.