Communicating Psychological Science: The Importance of Common Language

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What's the best way to connect scientific research with interested parties? Well, this question comes with a hidden assumption that interest exists within a diverse set of audiences in the first place. What is often overlooked is the need to create a common language between specialists and nonspecialists.



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Defining common language is not a one-size-fits-all task, but it is critical for ensuring two-way conversations. It's also important to acknowledge that communication goes beyond words. Other essential pieces of the puzzle are knowing the target audience and meeting them on their level: understanding how they use scientific knowledge on a daily basis, what tools they use, and what their creative processes and typical communication methods are.

Recent curricular approaches in higher education provide a promising example of the importance of creating common language in project-based curricular settings. Project-based learning changes the instructional paradigm by disrupting the traditional lecture; instead of listening passively to an expert, students interact with their peers and teachers as they work on a common project together. Through this approach, their acquisition of scientific knowledge goes beyond memorization of facts. Learners define a common language and use it to express tangible goals and outcomes. The benefits of this approach are robust across different disciplines, and research shows that project-based learning enhances students' educational experience, learning, and performance (Blasco-Arcas et al., 2013; LaCosse et al., 2017).

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A growing body of educators from many disciplines use project-based learning. The active learning component of working on a project helps students examine, analyze, evaluate, and apply core concepts, providing them with the opportunity to be cognitively engaged in their own learning process (Chinn, 2011) and empowered to have a say in their own education (Erickson, 2015). It's not surprising that universities invest in idea labs, engineering initiatives, and digital humanities collectives that use this approach. This new generation of students graduates with real-life skills to become idea-makers, inventors, and entrepreneurs because upon graduation they are equipped with theoretical knowledge and the toolbox to communicate it effectively, to both specialists and nonspecialists. Their diploma means

something!

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In the past, when I used project-based learning curricula, I asked my students a very basic question at the end of each module. *Why should we care about this information?* Answering this question required them to think critically. I followed up with a second one. *Who would care about this information?* This question elicited a diverse set of responses aligning with students' own interests. This is when I observed my students treating scientific information as a resource for productive messaging when they created blogs on literacy, prepared photography exhibits on immigration, and produced informational videos on developmental facts. They had to think about how scientific knowledge connects to real-life settings: the world became relevant to our learning context.

<u>See examples of project-based learning outcomes in Dr. Gürcanl? Fischer-Baum's work at</u> <u>Rice University.</u>

Project-based learning helps students grow beyond being simple consumers of information. As successful users of scientific knowledge, they focus on two main questions: *What's the expected outcome?* and *What's the make-up of the audience?* With a critically established common language and carefully planned communication efforts, students can use scientific information as a tool to solve a problem and filter it as necessary throughout the project.

As Kurt Vonnegut wrote, "If it weren't for the people ... earth would be an engineer's paradise" (p. 322). He could have said the same about any profession, including psychological science. The use of language to communicate ideas always comes with the risk of the message getting lost in translation –creating a common language is instrumental in helping us talk about science. Project-based learning trains the next generation of scholars to communicate science to diverse audiences and makes room for specialists and nonspecialists to work in harmony.

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