

# Moving from book learning to self-directed learning: A challenge for educators in psychology

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Any educational system that does not involve the learner as an active participant is doomed to eventual failure, however successful it may appear in the short run". P.K. Rangachari, *Biochemistry and Molecular Biology Education* 2002; 30(1):57-60.

Rote learning is important. There's a certain number of facts or propositions within a discipline that we need to know, and rote learning (reading, memorizing, and writing tests) is one way to accomplish this goal. But it's not everything.

Over the past two years, I have written several articles to raise awareness about issues I uncovered during my transition from an undergrad/graduate degree in Biology to a doctoral degree in Clinical Psychology at York University. I noticed early on that teaching in Psychology was considerably different from my previous experience. Recently, I became more accepting of how difficult it would be to bring laboratory exercises to a Psychology course. So, I asked myself, how can I and other educators in psychology bring the self-directedness, problem-based and conceptual learning that the science laboratory curriculum offers to psychology students?

One potential solution might involve placing greater emphasis upon problem-based learning (PBL) methods. A key leader in PBL is Dr. P.K. Rangachari, a Professor

Emeritus at McMaster University, who focused on student-centered learning methods that foster autonomy. He has developed multiple methods of PBL and evaluation during his tenure in the MD undergraduate program and biology-pharmacology cooperative education program at McMaster.

One of these methods is the TRIPSE (a tripartite problem solving exercise)- a 3-phase small group exercise. Students are given a scientific problem with a limited amount of information. They devise explanations that might account for the observations (30-45 minutes). In the second phase, students design experiments to confirm or deny their expectations (30-45 minutes). A tutorial leader provides feedback in the first and second phases. In the third and final phase, students conduct a literature review for additional studies (usually over a week or so), and then reflect upon and write about their first approach in light of the new information. At the end, students are given an outline of the essential factors that needed explanation, as well as individualized feedback about their conceptualization and experimental testing.

PBL methods afford greater levels of student engagement, experience in problem conceptualization and self-directed learning, as well as greater engagement by tutorial leaders to facilitate the learning process. One challenge in the future of Psychology as

a scientific discipline is to augment the curriculum in ways that enrich students' independent learning and develop their ability to translate knowledge across

interdisciplinary environments. If you're interested, more information about Dr. Rangachari and PBL can be found at <http://fhs.mcmaster.ca/pbls/>.