## Combatting Dualistic Thinking in Professional Military Education

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This paper summarizes research originally described in Juan Remy, "Combatting Dualistic Thinking with Problem-Based Learning in my Classroom," (paper, U.S. Military Academy Master Teacher Program, 2015) accessed 7 April 2017, http://www.usma.edu/cfe/Literature/Remy\_16.pdf.

ducational philosophers of the past century, including John Dewey, Malcolm Knowles, Peter Jarvis, and others, emphasized that education in the classroom should complement students' lives. They recognized that personal engagement increases individual learning and allows students to become fully independent and self-directed learners. Higher education attempts to foster those qualities by encouraging students to use critical and innovative thinking in their studies. Similarly, professional military education (PME) must strive to be personally engaging and participatory to facilitate officers' cognitive development beyond dualism—or black-and-white thinking—so they can thrive in uncertainty. This paper describes how integrating problem-based learning with William G. Perry's scheme of intellectual development and William S. Moore's Learning Environment Preferences (LEP) questionnaire can lead to better outcomes.

Perry's scheme describes four cognitive development levels: dualism, multiplicity, relativism, and commitment.¹ In *dualism*, students learn to recognize, memorize, and regurgitate facts to get high grades; answers are right or wrong. In *multiplicity*, students acknowledge that information from the teacher can be questioned and therefore cannot be the ultimate answer. In *relativism*, students challenge data presented to them based on their experiences, and they want to participate and influence the outcome of problem solving, thus taking on greater ownership of their learning. In *commitment*; they adopt a final stand in their studies, and they formulate, research, and validate their opinions compared to their peers.

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## COMBATTING DUALISTIC THINKING

Moore's LEP questionnaire can be used to assess students' cognitive level according to Perry's scheme.<sup>2</sup> When administered before the start of a course, the LEP survey enables teachers to identify students' positions on the Perry scheme and tailor the course to promote further cognitive development toward multiplicity and relativism levels. Administering the LEP again at the end of the term can provide students and teachers evidence of students' cognitive growth resulting from their studies.

This approach has been used at the U.S. Army Command and General Staff College and at the United States Military Academy at West Point (USMA) to assess student cognitive growth.<sup>3</sup> At USMA, a group of sophomore students was surveyed to determine their position in Perry's scheme. This information gave the instructor and the students insight regarding their current perspective on learning and helped encourage students to strive to reach higher cognitive levels. When dualism was identified as a challenge, a problem-based learning approach helped reduce it.

Problem-based learning is an inquiry process in which students resolve questions, curiosities, doubts, and uncertainties about complex phenomena in life with maximum practice. The problem-based learning approach uses scenarios to allow teachers to be facilitators, not impediments, to individual learning. Problem-based learning allows students to retrieve, innovate, and use their knowledge to solve problems with current methods; therefore, students become more engaged in their learning.<sup>4</sup>

For example, at USMA, this author used the 2016 United States presidential election campaign to discuss how to conduct "enemy" analysis on each presidential candidate, using the military decision-making process (MDMP). In addition, wedding invitations were used to teach the importance of "the five Ws" (who, what, when, where, and why) in formulating a mission statement. This approach ensured each student had a firm grasp of the fundamentals of military operations while encouraging problem solving and critical thinking applicable on the battlefield and daily life. Using problem-based learning delivered some thought-provoking, attention-grabbing, and out-of-the-ordinary solutions during class while elevating students to, at least, the multiplicity position on Perry's scheme.

Implementing Perry's scheme with LEP and problem-based learning will help teachers keep students engaged in learning that is personally relevant to their own lives. Students will adjust, confirm, or identify their cognitive development level and track their progress. Problem-based learning will raise students' cognitive levels by keeping classrooms vivid with current and relevant discussions, allowing students to reach their own solutions to different problems and be confident that there could be multiple answers to one problem. Ultimately, understanding of Perry's scheme, coupled with a problem-based learning approach, will reduce dualism in the classroom. That approach will facilitate students' ability to develop their intellect and be critical thinkers while creating solutions to problems. Teachers will be a guide, not merely an authoritative figure for grading.

## **Notes**

- 1. See Barbara K. Hofer and Paul R. Pintrich, eds., *Personal Epistemology: The Psychology of Beliefs about Knowledge and Knowing* (Mahwah, NJ: Erlbaum, 2002) for a description of Perry's scheme.
- 2. William S. Moore, *The Learning Environment Preferences: Establishing Preliminary Reliability and Validity for an Objective Measure of the Perry Scheme* (College Park, MD: University of Maryland, 1987). The Learning Environment Preferences (LEP) instrument is available from the Center for the Study of Intellectual Development, 1505 Farwell Ct. NW, Olympia, WA 98502; see an "LEP Scale" example, not for reproduction, at the University of Southern Maine website, accessed 7 April 2017, <a href="https://usm.maine.edu/sites/default/files/Office%20of%20Academic%20Assessment/assess-res\_lep.pdf">https://usm.maine.edu/sites/default/files/Office%20of%20Academic%20Assessment/assess-res\_lep.pdf</a>.
- 3. Juan P. Remy, "Combatting Dualistic Thinking with Problem-Based Learning in My Classroom." This study was undertaken in the sophomore-level Military Science 200 (MS200), "Fundamentals of Small Unit Tactics" course that I taught in 2015. Some of the scenarios described in this article were used in 2016, after the paper was submitted.
- 4. Edwin M. Bridges and Philip Hallinger, *Implementing Problem Based Learning in Leadership Development* (Eugene, OR: ERIC Clearinghouse on Educational Management, University of Oregon, 1995).