Kathleen D. Lopez* (klopez@louisiana.edu), Department of Mathematics, P. O. Box 41010, Lafayette, LA 70504. Selecting Problems for Use in Problem-Solving Courses for Pre-Service Teachers.

At the University of Louisiana at Lafayette, problem-solving is used extensively in capstone courses for both middle school and secondary pre-service teachers. Working non-routine problems serve several purposes, and different problems accomplish different goals. In this presentation, these goals are discussed and sample problems that address each goal are given. These problems use the concepts of 6-12 mathematics but require a thorough understanding of such mathematics from the future teachers who solve them. (Received September 28, 2005)