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Jane R Cushman^{*} (cushmajr@buffalostate.edu), 1300 Elmwood Ave, BI 343, Buffalo, NY. Developing a Survey to Assess Pre-Service Teachers Views and Uses of Problem-Solving in Mathematics. Preliminary report.

Mathematical problem solving is now a process strand in many state and National standards. Experiencing and valuing problem solving by our pre-service teachers is important in order for teachers to emphasize it in their future classrooms. A survey used to determine if teachers value problem-solving strategies and if teachers will use problem-solving strategies in their classrooms was developed. The following is the method used to develop the survey. On the last day of two sections (N=47) of a non-lecture upper division mathematical problem-solving class, the students listed at least three ways their class experience was different from a traditional lecture-based mathematics class. The responses were compiled into 10 questions about problem-solving strategies and 10 questions about the use of problem solving in teaching of a mathematics class. Verification and validation used the following procedure: pre-service teachers (n=10) took the survey and then wrote what they thought each question meant. The responses were coded positively if the statements matched what the researcher meant the questions to ask or negatively if not. One question was coded negatively for nine of the 10 responses (that question was rewritten). (Received September 20, 2007)