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**Mary T. Treanor\*** (mtreanor@valpo.edu), Dept. of Mathematics and Computer Science, Valparaiso University, Valparaiso, IN 46383. *Mathematical Proof: how to make it accessible to students*. Preliminary report.

This talk will describe strategies that the presenter has developed or has adopted from colleagues which are useful in “bridge” courses, in upper division courses for majors, and in other settings. Many of these use cooperative learning in small groups, a setting in which most students find it easier to try out new ideas, to express their thoughts orally or in written form, and to voice the misgivings with their work that make them hesitant to share it in any format. There are useful formats for worksheets that make it easier for students to explore ideas, to organize their conclusions, to structure coherent proofs; some of these may be for work in class, others for homework or for organizing a series of proofs which may become a week-long or several week project. How such work is evaluated is crucial in determining whether students become adept in structuring their thought well or whether they lose confidence and come to dread being asked to give a proof. Helping them to read texts more critically and with greater understanding, giving them numerous examples of well written proofs, and showing them that it is possible to have very different proofs of the same result—all of these give students the freedom they need to become competent in dealing with mathematical proofs. (Received September 15, 2000)