ABSTRACT: Collaborative Learning has been identified as useful tool for improving the problem solving skill of novice programmers. Computer Supported Collaborative Learning (CSCL) aims to improve the collaborative learning experience by utilizing technology to enhance the quality of collaboration. A CSCL framework for online multiplayer games was developed and an online multiplayer game Collaborative Online Problem Solving (COPS) was built using this framework. COPS requires its players to collaboratively build program flowcharts while encouraging equal participation, argumentative discussion and promoting positive interdependence. Two studies were done to evaluate the effectiveness of COPS for learning problem solving; the first examined the usefulness of COPS for students who were being introduced to programming/problem solving for the first time and the second examined its usefulness for students who had been previously introduced to programming. The implementation of COPS and the results of these two studies will be presented in this seminar.