We will describe an intervention in the form of a voluntary 75-minute per week proving supplement for an undergraduate real analysis course, which we studied and facilitated for three semesters. Both the research and the facilitation were guided by our theoretical perspective (Selden & Selden, in press-a, in press-b). Since no major reorganization of the real analysis course itself was undertaken, we feel such a supplement could be implemented practically by many mathematics departments. We will briefly mention relevant parts of our theoretical perspective, where it came from, and how we came to teach the supplement/intervention. After that, we will describe our teaching actions as facilitators in preparing for, and leading, what we came to call co-construction (McKee, Savic, Selden, & Selden, 2010). After describing a sample supplement session, we will discuss the usefulness, advantages and disadvantages of this kind of supplement/intervention, some evidence that it “worked”, who benefited, what sorts of things the participating students learned, and what kinds of questions they asked during the supplement. (Received September 20, 2015)