The purpose of the study was to compare the effectiveness and efficiency of two stimulus fading procedures, within-stimulus procedure and extrastimulus procedure, in teaching functional academic skills to three second grade students with moderate mental retardation. The parallel treatments design was used to assess the effects of the two instructional procedures. The results indicated that both procedures produced criterion level performance in the training setting, and generalized across trainer and stimulis. However, the within-stimulus procedure was more efficient than the extra-stimulus procedure in terms of the number of sessions, percent of errors, and minutes of direct instruction time.