Print-based instructional materials have been more popular than any other medium for teaching practical skills during the delivery of technical and vocational education and training via distance learning. However, the approach has its shortcomings and in recent times alternatives have been sought. The comparative instructional effectiveness of one such alternative is the focus of this paper. The study sought to examine the instructional effectiveness of video-based instructional materials vis-à-vis traditional printbased instructional materials for teaching distance learners of a Block-Laying and Concreting practical skills programme. An experimental design was used and participants were randomly assigned to two treatment groups: Users of video-based instructional materials or users of print-based instructional materials. A researcher-designed performance test and an achievement test of 20 multiple-choice items were used to collect data from 34 participants who used print-based instructional materials and 35 participants who used video-based instructional materials to learn practical skills. The instruments were based on the instructional objectives of lessons on mortar and wall finish. Pilot test data for the achievement test yielded Cronbach's alpha of 0.84. Descriptive statistics and t-test at a 0.05 level of significance were used to analyse the data. The results indicated that the two instructional materials were pedagogically equivalent in terms of theoretical knowledge acquired. Practical skills acquired, however, were significantly higher among users of video-based instructional materials. Finally, users of videobased instructional materials displayed significantly superior craftsmanship.