When the Army reclassifies soldiers, it reduces personnel shortages by moving soldiers from surplus MOSs to shortage MOSs. When it cross-trains or consolidates soldiers, it helps alleviate personnel shortages by moving soldiers from nonshortage MOSs into similar shortage MOSs. However, there is another reason that some MOSs have shortage problems: Sometimes positions, while not vacant, lack fully qualified soldiers. We speak here about problems in the timing of NCOs completing the Army’s BNCOC and ANCOC. If training for those who need it could be accelerated, then the shortages in trained personnel could be reduced.

In this chapter we look at the potential for DL to accelerate training, beginning by providing some evidence that there is a problem in this area and then showing how DL might help. We end, as before, by discussing some potential forcewide benefits.

ACCELERATION OF NCO TRAINING IS NEEDED TO REDUCE SHORTAGES

The size of the Army’s E6 and E7 trained inventory would increase if soldiers needing BNCOC and ANCOC could be trained sooner. For FY99, we estimate that 8,500 E6 and E7 positions were occupied by soldiers not formally trained for those jobs or not trained for their grade. That number represents 2.4 percent of all authorizations, and 8.9 percent of E6 and E7 authorizations. For discussion purposes, we divide the number of untrained personnel into two groups. The first
group comprises soldiers who have been promoted to grades E6 and E7 but have not completed the required BNCOC or ANCOC. The second group comprises soldiers in E5 and E6 grades who are serving in E6 and E7 positions, respectively, but have not completed the required BNCOC or ANCOC.

There is evidence on the size and characteristics of the second group in recent RAND work studying NCO leader development. Figure 6.1 illustrates key results in those reports. RAND researchers examined the profile of NCOs assigned to operational units in November 1996. NCOs were divided into three groups—those serving above, at, or below grade (the grade the position requires is above, at, or below the grade held by the NCO)—and their promotion and separation rates were examined. Across E4s–E8s as of November 1996, we find, as shown in the figure, that about 10 percent of E4s–E6s indeed serve above grade and about half as many (in percentage terms) E7s do. Some, but not all, above-grade NCOs had already been selected for promotion to the next-higher grade and are eligible to attend formal NCO schooling.

There are a couple of reasons for this problem. One has to do with high personnel tempo (PERSTEMPO) demands. Given the importance of senior leaders in units, it is often difficult for NCOs to get the time to go away for extended periods for training. A second reason is that some of those serving in positions for which they have not been trained are upwardly substituted “fast-trackers,” mostly filling higher-grade positions for which there would otherwise be a shortage. The RAND research establishes the “fast-tracker” label by looking at one-year promotion rates for these three groups. For example, if we zero in on E6s who have between 7 and 10 years of service, we find that those serving above grade have a 16 percent one-year promotion rate, while those serving at grade have a 5 percent rate and those serving below grade have a 1 percent rate. Comparable E5 promotion rates are 20, 13, and 10 percent, respectively.

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1Research results are described in more detail in Shukiar, Winkler, and Peters (2000) and Winkler et al. (1998).

2Note that these are one-year promotion rates and not overall measures of promotion probability.
Even more surprising, the one-year separation rates for the three groups are about the same for E6s and E5s—about 30 percent. In other words, those serving above, at, or below grade tend to leave at about the same rate. This raises the question of what the Army can do to ensure that it retains these fast-trackers at higher rates than those of the overall group. This is especially important for fast-trackers in hard-to-retain, shortage CMFs.

The current process for dealing with fast-trackers exacerbates the NCO shortage problem. Such fast-trackers are frequently not formally trained, depending instead on OJT until formal promotion and training can occur; unfortunately, the lack of timely training/promotion/compensation reduces the incentive for these soldiers to stay in the Army, which in turn leads to the disappointing retention rates noted above.
In addition to some NCOs serving in positions above their grade before training and promotion (the fast-tracker problem), other NCOs are serving in positions at their grade level but are not trained for their grade. While the Army would prefer to train all soldiers before they promote them, in practice, shortages in time and money keep it from reaching that goal.\(^3\) Figure 6.2 illustrates this point and further supports the notion that NCO training needs acceleration. Only 76 percent of the E6s were trained before promotion in FY99. An additional 16 percent were trained within one year after promotion, and 1 percent were trained more than a year after promotion. Seven percent have no record of any training after their promotion, in either the personnel records (EMF) or the training records (ATRRS). Even fewer E7s were trained before promotion, 33 percent. Most (63 percent) were trained within the year after promotion. Three percent were trained more than one year after promotion, and 1 percent have no record of training completion. These figures further support the contention that NCO training needs acceleration, especially given the fact that the new NCO Educational System (NCOES) model is expected to require even more NCO individual training.\(^4\)

**DL CAN HELP ACCELERATE TRAINING**

DL could make training possible earlier in the select-train-promote sequence. First, DL training can begin before scheduled residence training courses are available. Second, DL training can be taken in small pieces, on a “continuous” basis. Third, DL training can occur at home station. Fourth, modularized DL courses allow “testing out” of already mastered material, which means that fast-trackers who get much of their experience through OJT would not have to sit through the parts of course material they have already learned. Finally, DL can enhance self-development training. While self-development training is one of the Army’s three pillars of leader development\(^5\)

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\(^3\)Current Army policy gives E6s and E7s one year (and occasionally longer) from the point they are promoted to complete BNCO or ANCOC.


\(^5\)The three pillars are institutional education, operational experience, and self-development.
How DL Can Accelerate the Pace of Professional Development Training

Soldiers promoted to E6 in FY99; BNCOC status August 2000

Soldiers promoted to E7 in FY99; ANCOC status August 2000

Figure 6.2—Many NCOs Are Schooled After Promotion

and is a promising way to train fast-trackers (who are somewhat more likely to be motivated toward self-development), it needs further refinement to be useful in this context, focusing more on military and leadership training.6

Using DL to accelerate NCO training will reduce shortages of trained personnel. First, DL can reduce the time to training completion, thus decreasing the number of untrained personnel. Second, DL training can increase the training readiness of fast-trackers. More specifically, it can support OJT but be monitored by the schoolhouse and, as mentioned above, could provide modularized training that allows “testing out” in areas where OJT has already occurred. And third, DL

6For further discussion, see the other report from this research project, Leonard et al. (2001).
training for BNCOC and ANCOC can set the stage for grade-specific reductions in shortages.

This last point is illustrated in Figure 6.3, which shows how earlier ANCOC training for the Microwave Systems Operator/Maintainer MOS (31P) could help enable the reduction of grade-level MOS shortages. The three columns in the figure show the number of assigned soldiers in the 31P MOS who are E5s, E6s, and E7s. The line shows how many positions are authorized for each grade, and the contrasting hatched pieces on top of the columns show surpluses and shortages (i.e., how much the assigned number is above or below the authorized number). The figure shows a shortage of E7 soldiers coupled with a surplus of E6 soldiers. DL could help in this situation by training E6s sooner to increase the professional development level of the E7-eligible inventory.\(^7\) Thus, as much as 30 percent of the E7 shortage could be filled by surpluses in the E6 grade of the same MOS.\(^8\)

DL could also help with E7 shortages in 31P if there are instances of E6 fast-trackers who are already filling E7 positions. In that case, one might envision that soldiers would be allowed to continue to learn while on the job, but with the full support of schoolhouse instructors at a distance. Moreover, those soldiers, who will gain substantial experience while on the job, might also be allowed to test out of substantial portions of the course when they eventually take it.

**POTENTIAL FORCEWIDE BENEFITS OF ACCELERATING TRAINING THROUGH DL**

Accelerating BNCOC and ANCOC using DL can reduce shortages in trained personnel by increasing the professional development level of personnel in E6 and E7 positions. We estimate that 8,500 E6 and E7 soldiers could benefit from accelerated training through DL.

\(^7\)Of course, actually increasing in the number of promotions to E7 is a decision that is independent of DL.

\(^8\)The potential effect of accelerating ANCOC in the 31P case is limited to the surplus in the E6 grade. The fill rate for E7s was only 76 percent in June 1999, 44 NCOs short. If the training for fast-trackers in E6 could be accelerated, the overall E7 fill rate would improve, but only to the extent that surpluses existed at the E6 level. In the case of 31P, a surplus of 13 exists, 30 percent of the total E7 shortage.
Those soldiers fill positions representing 2.4 percent of all authorizations, and 8.9 percent of E6 and E7 authorizations. The majority were “fast-trackers” serving above their grade level without formal training. The remainder were soldiers who, although serving at grade level, had not yet received the training required for that grade. Although we did not examine BNCOC and ANCOC courses in this report, there may also be, as in the case of reclassification courses, opportunities to increase the cost-effectiveness of that training using DL. Finally, with the new NCO Educational System (NCOES) model projecting more individual training for NCOs, we think the level of potential application of DL for BNCOC and ANCOC will increase in the future.

However, the idea of using DL to accelerate training must be approached cautiously. Although a DL student need not wait for an opening in a residential training program, a poorly implemented DL program could easily not only fail to decrease the time to training completion, but actually increase it. This can occur because DL places more responsibility on the student and the chain of command.
in an environment with many competing demands. Moreover, because asynchronous portions of DL training will not have to be completed on a continuous basis, the time it takes a soldier to finish training can be longer than the course length. Lower completion rates and longer elapsed times to course completion can easily result in this environment, unless sufficient support is dedicated to achieve the desired training acceleration. Features of DL that can increase the speed of training include selecting highly motivated personnel for that type of training, fencing a large percentage of soldier time for training, using goal-setting and monitoring tools to support asynchronous training, and providing easy access to instructors and other subject-matter experts to expedite training.