

Case Study Two - The Effect of Training on the Productivity Gap

The economist Ann Bartel analysed data on the productivity of a sample of 155 American manufacturing firms in 1983 and 1986. She measured productivity by looking at the firms' sales per worker, minus the cost of the inputs used in production. She also had information on the percentage of the workforce receiving formal training, and the year training programs were implemented.

Looking only at the 1986 data, Bartel found no relationship between the existence of formal training programs and productivity. However, the existence of data for two years allowed her to look at the effect of implementing training.

The survey showed that firms with lower productivity than other comparable firms in 1983 were more likely to have implemented formal training programs between 1983 and 1986. This was not true for any of the other human resources practices considered. In other words, training was the preferred strategy for firms attempting to raise their productivity from a low level.

The next step was to see whether this strategy was effective in raising productivity. Bartel found that the productivity of firms implementing training programs rose by 18.66% over the three year period. Again, there was no such effect for other human resources practices. This suggests that the decision to use training to address productivity problems was justified.

Perhaps more importantly, by 1986 the firms with low productivity which had implemented training programs had caught up with other firms. There was no longer any significant productivity gap between these firms and those which had had high levels of productivity in 1983. Other firms which had low productivity and had not implemented training also improved, but remained behind their competitors in 1986.

Two major conclusions can be drawn from this study. Firstly, for this sample of American manufacturers in the 1980s, training was the preferred strategy for addressing a situation where their productivity was lower than their competitors. Secondly, this strategy was effective. Training improved productivity more than any other strategy considered. This improvement was large enough that firms implementing training programs had caught up with their competitors over a three year period.

Source: Bartel, A. P. 1994 'Productivity Savings from the Implementation of Employee Training Programs' *Industrial Relations*, vol. 4, no. 4, October, pp. 411-425,