

# Improved Teacher Effectiveness Leads to Better Jobs

The following is a summary of an article published in Education Next entitled *Valuing Teachers: How Much is a Good Teacher Worth?*. There is great concern as the U.S. has fallen behind other developed countries in terms of the educational achievement of its students. The low achievement of American students, as reflected in the Program for International Student Assessment (PISA), will prevent them from accessing good, high-paying jobs. And lower achievement means slower growth in the economy.

Research confirms that the quality of the teachers in our schools is paramount: no other measured aspect of schools is nearly as important in determining student achievement.

School improvement initiatives such as: class-size reduction, curriculum revamping, reorganization of school schedule, investment in technology, school choice and vouchers all fall far short of the impact that good teachers can have in the classroom. Moreover, many of these interventions can be very costly. Indeed, the magnitude of variation in the quality of teachers, even within each school, is startling.

## Measuring Teachers' Impact

Many of us have had at some point in our lives a wonderful teacher, one whose value, in retrospect, seems inestimable. We do not pretend here to know how to calculate the life-transforming effects that such teachers can have with particular students. But we can calculate more prosaic economic values related to effective teaching, by drawing on a research literature that provides surprisingly precise estimates of the impact of student achievement levels on their lifetime earnings and by combining this with estimated impacts of more-effective teachers on student achievement.

Let's start with the researcher's point of view. With a normal distribution of performance (the classic bell curve), a standard deviation is simply a more precise measure of how spread out the distribution is. Somebody who is one standard deviation above average would be at the 84th percentile of the distribution. If we then turn to the labor market, a student with achievement (as measured by test performance in high school) that is one standard deviation above average can later in life expect to take in 10 to 15 percent higher earnings per year.

Does 10 to 15 percent amount to much? For the average American entering the labor force, the value of lifetime earnings for full-time work is currently \$1.16 million. Thus, an increase in the level of achievement in high school of a standard deviation yields an average increase of between \$110,000 and \$230,000 in lifetime earnings.

We can also approach this valuation calculation from the perspective of the impact of teacher effectiveness on the U.S. economy as a whole, rather than just on the future earnings of students. Student achievement, which provides a direct measure of later quality of the labor force, is strongly related to economic growth. Improving achievement leads to a better prepared workforce and to greater growth, and this growth translates into higher levels of national income.

What would happen if the very lowest 12% of performing teachers could be better prepared, improving their effectiveness so that they became just average teachers? Closing the achievement gap with Finland, as an example, would, according to historical experience, have astounding benefits, increasing the annual growth rate of the United States by 1 percent of GDP. Accumulated over the lifetime of somebody born today, this improvement in achievement would amount to nothing less than an increase in total U.S. economic output of \$112 trillion in present value. (That was not a typo—\$112 trillion, not billion.).

**Note:** The Teaching and Learning Foundation believes better jobs for America's graduates can be accomplished with help from states and foundations in the form of grants to a dedicated scholarship fund to pay for teacher tuition and fees in the *Expert Systems for Teachers*<sup>™</sup> series hosted by UNF and USF (see UNFteacherPD.org or USFteacherPD.org).

## Effective Teachers Raise Students' Earnings

(Figure 1)

The economic value of an effective teacher grows with larger classes, and the economic costs of having an ineffective teacher are substantial.

