



# Education and Economic Development: Beginning a Dialogue

Good morning, everyone. On behalf of the Federal Reserve Bank of Cleveland, I would like to welcome you to Day 2 of our conference on education and economic development. I have been looking forward to this event for some months now. It is a strategic objective of this Bank is to engage in research on issues that are important to our region. In my travels throughout the Fourth Federal Reserve District, and really throughout the country, education stands out as one of the most critical issues. I know that we will all benefit greatly from the presentations we hear and the discussions we share today.

If you were with us yesterday, you heard some of the latest research findings on education and economic development. Today's presentations will center on the policy-related issues. I think that both elements—research and policy—are essential to better understand how we can obtain the greatest possible returns to public funds devoted to education.

In my remarks this morning, I will first focus on why the Federal Reserve is interested in this topic. Then I will make a few comments related to the quality of education, and I will conclude by exploring the links between research and public policy. I have to warn you however, that I am going to be spending most of my time raising questions rather than giving answers or proposing solutions.

## I. The Federal Reserve's Policy Role

Let me begin with the question of why the Federal Reserve is interested in education and economic development. Most people know that our organization is responsible for setting monetary policy. Under the Federal Reserve Act, Congress has charged the Federal Reserve with promoting the goals of maximum employment, stable prices, and moderate long-term interest rates.

Of course, these goals do not specifically require us to do things like hold conferences on education. But to set an appropriate monetary policy, we must understand the dynamics of the real economy, and this means that we need to understand the policies that enhance or inhibit growth. Clearly, capital accumulation is a prerequisite for sustained economic growth. And when I say "capital accumulation," I am referring to this term in its broadest sense. This includes both physical and human capital.

To bring this issue closer to home, let me tell you why I have an interest in this topic. Most of you know that the Federal Open Market Committee, or FOMC, is the Federal Reserve's policymaking body. As president and CEO of the Federal Reserve Bank of Cleveland, I

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participate fully in the policy discussion, and this year I have had a vote on policy direction. Part of my role is to bring information about my District's economy to the FOMC meetings. To inform that local perspective, I rely on economic data from my Research staff as well as anecdotal reports from people in my District.

I spend a lot of time traveling throughout the Fourth District and meeting with business leaders to get their input on current economic conditions. More often than not, those discussions turn to questions about employment. People in our region are wondering why job opportunities have still not picked up all that much during the current economic expansion compared with this stage in previous expansions.

We suspect that some longer-term factors have been affecting the regional employment situation. Growing economies tend to change shape over time, and that eventually leads to economic transformation. By that I mean that some sectors grow faster than others, and some sectors might actually decline.

For example, at the turn of the 20th century, agriculture accounted for the majority of employment in our country, but today it accounts for only about 1 percent. Similarly, we have also been witnessing a decline in manufacturing's share of employment over the past 50 years or so.

Our region is certainly aware of the growing pains that accompany an economy in transition. Ohio remains far more concentrated in manufacturing employment than the nation—16 percent compared with 11 percent—so the manufacturing job picture affects our labor market more heavily.

Ohio's manufacturing tradition once gave many people a path to higher earnings without the need for higher education. We all know that day is over.

Like most other states and most other countries, we are seeing that manufacturing jobs are steadily giving way to jobs that may require different skills or educational requirements. And, in fact, the educational requirements of service sector jobs are changing as well.

I am convinced that education holds the key to our continued success as a region. My friend Luis Proenza, who is president of the University of Akron, has stated that lifelong learning has literally become the new infrastructure of our knowledge-based economy. Education, as infrastructure, means that we must be willing to see our schools, colleges and universities as key players in economic development—because of the talent they create, the research they conduct, and the new knowledge they produce. It is partly from research and innovation that new companies are born and new jobs are created. Indeed, research and innovation help to drive economic expansion and the creation of new wealth.

In our Bank's 2003 Annual Report, we propose that innovation is the true engine of economic prosperity. Research and innovation can also play a vital role in advancing the performance of our educational infrastructure.

## II. The Question of Educational Quality

So let me now turn to the topic of educational quality. I think this is a dimension that is often overlooked. To take one simple example, if we look at data from developed countries, there does not appear to be much of a relationship between levels of education and levels of gross domestic product, or GDP. But on closer examination, it turns out that it is not just the level of education, but the quality of the

education that matters. And, once quality is included, we do find a significantly positive relationship between education and GDP. As a result, public policies that are designed to produce “more education” without regard to the quality of the product might lead to more years of education, but little lasting benefit.

A recent report from ACT, an organization that administers the college-entrance examination, states that the core curricula in American high schools are insufficient in preparing students for college-level work and even for job training. The report concludes that only 22 percent of the 1.2 million high-school students who took the ACT test in the 2003-to-2004 academic year were adequately prepared for college-level courses in English, mathematics, and science.

This situation has several important implications. First, it should give us pause to think that merely by raising high school and college graduation rates, the new graduates will have significantly improved their human capital. Second, we should question whether the additional public funding needed to achieve those higher completion rates would be money well spent if quality is lacking. Third, we must recognize that inadequate preparation places burdens on colleges, which will need to provide remedial education to entering students.

We must keep in mind that these problems are not someone else’s problems—they are our problems. The problems I have been describing are common throughout the country. Solutions are not obvious, and resources are scarce. A further complication is that different constituents often have firmly entrenched views on how to address these issues, whether or not their opinions are supported by the facts.

### III. A Look at the Link Between Research and Public Policy

That brings me to the final area I want to comment on this morning, and that is the connection between research and public policy. As we will see in our discussions today, it is useful to think of producing education in the same way we think about producing any other good. Take some inputs, put them together in a certain way, and produce some output. Well, that’s a good starting point!

But immediately we face several critical questions, which we do not know how to answer with any comfortable degree of certainty:

First, what are the inputs to education and how do we measure them?

Second, what is the output and how is it measured?

Third, how should the inputs be combined?

And finally, what roles do governments play in ensuring that the best combinations take place?

If we go back to the basics and seek answers to these fundamental questions, I think we will go a long way toward better understanding how we actually produce human capital today, and how we might obtain even better outcomes in the future.

Believe me; I appreciate the role that economists play in sweating out the details of measurement issues and education production functions. But when all is said and done, those of you in the public policy arena are responsible for allocating scarce public resources to achieve the highest return from the dollars invested.

Because governments control so much of the educational machinery, important resource allocation decisions are made in the political arena, not the marketplace. In recent years, frustration with

government solutions has resulted in educational experiments designed to simulate some aspects of market systems, such as vouchers and charter schools. I think it is fair to say that there are few aspects of educational policy and financing that are free from controversy today.

I know that many people in this region are uncertain about the condition of our educational infrastructure. People wonder, for example, whether we are paying enough attention to the potential benefits of expanding early childhood education, whether we are spending the right amount of money on primary and secondary education, whether state funding of education at all levels is too low, and whether the outflow of college graduates is too large. These are legitimate concerns that deserve further study.

We can begin with the education of very young children. I suspect that many of us regard early childhood education as a sound investment, yet most of the public infrastructure and policy discussions are centered on the later years of a child's education. As a rule, most early education is the responsibility of the families involved, and can take a number of different structures, both formal and informal. Are public policy makers missing something important by not paying more attention to preschool education? There is a large body of research on this topic, and we will hear a summary of that work this morning.

Moving to the middle of the educational spectrum—primary and secondary education—we hear some differing opinions. Some say we are not spending enough, and others say that money alone is not the answer to improving educational outcomes. Those who call for more money discuss using those funds to reduce class sizes, to pay teachers higher salaries, to purchase more equipment and supplies, and to improve the physical condition of schools. Those who downplay the benefits of additional funding think that we can improve educational outcomes by making more effective use of the dollars we already have available.

How much latitude do local school boards and superintendents have to effect change within their school districts? What have we learned that could help us evaluate these subjects? These topics will be discussed later this afternoon.

Finally, what about higher education? It is not uncommon to hear college and university presidents justify requests for increased public funding with the logic that college-educated people earn more than those who have not completed college. Presumably, the taxes that these newly educated people will pay on their higher earnings over time will more than pay for the increased public subsidies. This might be true in some instances, but how can we determine when, and to what degree?

There are several other questions to consider. If individuals have such great earnings potential, why don't we expect more students to finance their own educations? Are the public benefits to higher education so large that they merit public subsidies? If public assistance is warranted, how might we know whether public institutions should reduce tuition, or whether loan assistance or tuition tax credits make more sense? I don't expect that we will be able to answer all of these questions today, but by asking them, I hope to make the point that different approaches might have different consequences — and each of them merits our attention and analysis.

Education finance policy can have consequences for all citizens through its potential effects throughout the tax system. States typically rely on sales taxes, property taxes, and income taxes to

finance their schools. But we know that states differ greatly in how they use these taxes, and how much of the financing is at the state and local levels. Many states are in turmoil over how to design their financing systems.

We know that the way education is financed has consequences for those who bear the financing burden. As a general rule, people will take actions to avoid the burden, often by moving away. Public policy makers need to anticipate these consequences and be prepared to accept them.

## Conclusion

We know that it will take time and money to achieve better outcomes. But progress will also require a willingness to think in new ways about educational goals and the trade-offs involved in attaining them. To create lasting change, many stakeholders will need to participate in the discussions, which is why I am pleased to see such a diverse group here today.

My hope is that by sponsoring this conference, we can call attention to what economists have learned from studying the design and performance of education systems. The Federal Reserve Bank of Cleveland views this as an important public policy issue, one in which we will remain active in helping to search for better outcomes.

Thank you for participating in our conference and for your commitment to the goals of education and economic development. Together, we can begin to ask the important questions about education and public policy, and then use what we learn to help build educational systems we can all be proud of—systems that will help our region, and our country, prosper.