

Essay 16

# Look Before You Leap...Frog

#### **David Baker**

Professor of Sociology, Education, and Demography, Penn State University

# Maryellen Schaub

Assistant Professor of Education Policy Studies, Penn State University



# Leapfrog, it conjures images of the joyful childhood game.

At its best, players propel themselves forward, skipping over the place of others and landing on solid footing. As a strategy for education development, leapfrogging implies strategic advancement especially for developing countries that avoid 20th century pitfalls such as inefficiency and inequality that developed countries encountered. But the desire to skip the small incremental advancement comes with considerable risk of landing on weak footing without preparation for the unknown future. Global development experts should look ahead to where accelerated education development will take these societies and anticipate quickly appearing social challenges from wide-spread education, and then assist to the degree that they can in preparing for these.

Supplying quality formal education for all children and youth is key to achieve social, democratic, and economic development across the world. Universal education is an urgent global mission for impoverished regions. Particularly now that so many nations are a fully "schooled society" reaping the benefits of extensive educational development. The schooled society holds much promise, but as with every large-scale human endeavor, it comes with consequences leading to future challenges that are often under-anticipated and for which we are ill-prepared to manage.

From a wide range of technical sociological, epidemiological, demographical, and political studies, we now know that along with invaluable human capital accumulation and other positive transformations from education development comes a new type of society with unique social problems. Education attainment is not just a relative status placed upon the individual or merely imparts narrow skills, it leaves an indelible absolute effect on the whole person. More schooling changes people in fundamental ways, even up through tertiary levels. Thus, with larger cohorts of educationally transformed people societies change, and we now know the changes happen much faster than originally assumed, perhaps particularly so from leapfrogging strategies of educational development.<sup>1</sup>

Just a few examples illustrate the challenges of what will rapidly come along with all the benefits of universal education. Net of economic development, educated populations are healthier ones, certainly a positive, but with this comes rapidly rising longevity with high rates of expensive chronic disease burdens and other dependency costs from greying populations. We also know that supplying formal education is the key factor in reducing high fertility rates, but within just one generation, it can also lead to plummeting sub-replacement levels and the challenges of shrinking societies. At the same time, the educated within populations are frequently the first to adopt and normalize the use of new products and lifestyles that ultimately have significant health risks for the whole population, such as occurs with new tobacco products, new illicit drugs, food trends, new sedentary occupations, and so forth. Also, the educated are more politically active but not necessarily more moderate or uniformly ideological, which can lead to greater divisive political conflicts. And the list goes on.

Again, educational development is crucial for the collective good of humans everywhere. Ours is not a plea for deschooling or for some rationing scheme, which are impossible anyway given the inexorable demand for education, not to mention that both would be socially unjust and ultimately dangerous to the social contract. Instead, along with leapfrogging education, we should project forward to see where a rapidly built schooled society would take the people living within it, and help think through how earlier warning about the resulting challenges could serve to lessen their impact.

One likely challenging consequence from rapid educational development that both of us have examined is how new forms of pernicious social inequality arise from otherwise noble attempts to provide as much equality of educational opportunity as possible. Expanding access to education, even to reasonable levels of quality, is not optimal if there are built-in inequalities that amplify existing disadvantage. This leads to underdevelopment of a population's human capital potential as well as other social problems arising from inequality. Notably, a clear, if at times uneven, phenomenon among the world's most educated nations is the tendency to make access to educational opportunity equal. An obvious example of this on the world stage is the significant campaign for increasing girls' access to schooling. And this general trend is for the good.

But, as national systems of education install more policy aimed at equable access to educational opportunity, they can unintentionally set off intensifying levels of private investment in educational opportunities by



families. And such private purchasing of additional educational advantage can lead to a kind of "educational arms race" creating new forms of social inequality. As educational development in a nation deepens the centrality of formal education in the labor market, cross-cutting pressures for more equality of public schooling motivates family investment in educational advantages, which can in the extreme form new inequalities.

# SOUTH KOREA AS LEAPFROGGING IN THE SECOND HALF OF THE 20TH CENTURY

An informative example of this challenge is what has happened during South Korea's rapid educational development. With half of its population illiterate and suffering a very low GDP, just sixty years ago this nation would have been a prime candidate for leapfrogging educational development. In fact, in many ways, this is exactly what the nation did with stunning success. South Korea inexpensively developed public education up through higher education at a remarkable pace, all the while building a high performing, accessible, and extremely equitable system; one that has enacted policies that are the envy of most other nations. Yet, at the same time, South Korea experiences among the world's highest private investments in education by families, an educational arms race many Korean policy analysts fear to be an inexorable nightmare of social inequality.

As a direct result of rapid, efficient, and equitable public education development, South Korean families carry one of the world's highest levels of private investment in pre-tertiary education; with average expenditure estimated to be 10 percent of family income, a financial burden that increased by about 15 percent from 1990 to 2010, and claims a share of household budgets just behind food, lodging, and debt payments for families with students. Often starting with preschoolers, families spend significantly on various forms of private supplementary education services, including after-school cram schools, one-on-one tutoring, and online services up through secondary schooling. While some services are aimed at peripheral activities, most are for either enrichment or remedial academic performance enhancement and test preparation in the public system. All of this is provided by a flourishing private industry with sophisticated advertising strategies, dynamic e-learning programs, superstar lecturers and tutors, and a widely known and respected status ranking among cram schools. At the same time, the industry, and its cost and consequences, is a central and divisive topic in the intense education politics of the country.

Referred to by educational analysts generally as "shadow education," this growing global phenomenon is, of course, well known, but it is usually chalked up to a reaction to an over-the-top high-stakes testing regime and a strange cultural legacy. What is less known is that neither are the main driving force. Instead, educational development drives shadow education. Over the past 60 years, each time the Korean government established a new level of policy intensifying equitable educational opportunity, often directly aimed at lowering social inequalities, families upped their investment in shadow education. And forms of this dance are occurring across the world. Note the increase in private school use throughout South America as governments there developed fuller access to public schooling. In addition, shadow education is increasing worldwide and not limited to any one cultural style of schooling or testing regime.

It is also clear from the South Korean experience that heavy-handed government policy to ban shadow education will likely backfire. Plus, ironically, the interplay between these two trends does motivate some of the best policy about access and equality to public education.

From a societal point of view, too much investment in shadow education can lead to more harmful inequality. Of course, at the same time, the use of shadow education by parents in low-income nations as a substitute to underdeveloped public schooling is potentially a short-term reasonable strategy, and very understandable. But the Korean problem suggests a more challenging consequence of educational development.

To what degree an educational arms race is an inevitable outcome of educational development, particularly rapid development, is unclear, although right now the best research suggests that it is very likely. The situation is further complicated by the fact that usually the bulk of the families buying shadow education also support equal educational opportunity policy for the good of the whole society. Although there is likely no easy fix, we should not be overly cynical, and some enlightened policy approaches could be developed to limit this likely problem.

As developing countries hope to leapfrog as an advancement strategy, we observe that the possibility of catapulting into the future, skipping over the small incremental steps that characterized the expansion of public systems of education in the 20th century, has tremendous appeal and the possibility of meaningful amelioration. But landings need signif-



icant foresight. At the very least, as we leapfrog into faster expansion of education, and along with all the good it can do, development experts should help prepare national governments and societies for the range of new social challenges that we know will come with a schooled society.

#### **ENDNOTES**

- 1 Baker, David. The schooled society: the educational transformation of global culture. Stanford, CA: Stanford University Press, 2014.
- 2 Bray, Mark. The Shadow education system: private tutoring and its. UNESCO International Institute for Educational Planning (IIEP). 1999. http://unesdoc.unesco.org/images/0011/001184/118486e.pdf.
- 3 Byun, Soo-yong. "Shadow education and academic success in Republic of Korea." *Korean education in changing economic and demographic contexts*, 39-58. Springer Singapore. 2013.





### **David Baker**

Professor of Sociology, Education, and Demography, Penn State University

David leads multidisciplinary and international research projects on the impact of the worldwide education revolution including the expansion of higher education in the U.S. and elsewhere. Recent studies are on education's influence on the knowledge society, economy, and global mega science over the 20th century, labor market payoffs from academic degrees and cognitive skills, and population health trends. Baker frequently consults with multilateral organizations and national governments on education policy. His recent book is The Schooled Society: The Educational Transformation of Global Culture, Stanford University Press.



# Maryellen Schaub

Assistant Professor of Education Policy Studies, Penn State University

Maryellen's research includes several US and comparative areas such as the intensification of cognitive demands on young children, the cultural significance of education, and the expansion of child rights worldwide. Her latest project is on the expansion of early childhood education. In the US, the proportion of children attending both kindergarten and preschool has steadily risen since the middle of the 20th century and now some states are offering universal preK. But what prompts this expansion of education and is a universal program the most effective and efficient use of our tax dollars? Or are targeted programs to low income children the best way to create equality of educational opportunity?