This article examines the features of the South Korean education system, a system radically different from that which exists in the United States and from which the United States might draw some useful lessons. In South Korea, students follow a routine of strict attention to their studies in a curriculum that emphasizes mathematics. Students are required to pass a series of competitive examinations at each rung of the educational ladder. The Korean government pays for each child to attend grades one through six, but parents must pay for middle and high school education. While there are limitations to the Korean approach to education, the United States can find much to emulate in South Korea's model of hard work and national commitment, with parents assuming partial responsibility for their youngster's educational success. (DB)
Education in Korea: Doing Well and Feeling Bad

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Education in South Korea is rooted in the stronghold of Confucianism, with disciplined study and competitive examinations forming the cornerstones of a system that has given Korean students one of the highest academic rankings in the world. It would be impossible to transplant the "Korean model" wholesale to the United States; in Korea, culture, tradition, family unity, and a national commitment to school success contribute to academic achievement. Education in South Korea is, in reality, a partnership among home, school, and government. But Americans can learn by taking a look at a system radically different from their own.

South Korean students scored first on a standardized math test given to 13-year-olds in six countries in 1989. American students scored last, coming in behind South Korea, Spain, Britain, Ireland, and Canada. The Bush administration, supported by the nation's governors, has as one of its national goals that American students will be first in the world in math by the year 2000. How do we reach the top in the areas of mathematics and science, without which leaders in business and industry are predicting the economy will falter?

Lock-step approach

Korean students spend far more time on their studies than do Americans. After reading a description of a typical student's daily schedule, we decided to conduct a few interviews to verify the surprising information. An average middle school student wakes up at 6 a.m. and goes to school at 8 a.m. At 4:30 he or she goes home to eat dinner and study. From 7 until 9 p.m., students whose parents can afford the tuition attend a second, private school to study math and English, then continue studying at home until about 1 a.m. These studies include watching an educational broadcast (KBC) on television, which provides more mathematics instruction. This schedule continues for six days a week, leaving Sundays free for family and recreation.

Korea takes a lock-step approach to education, requiring students to pass a series of competitive exams at each rung of the educational ladder. Entrance to middle school (the equivalent of our junior high), high school, and college is based on performance on exams. Students attend school 220 days a year. In an effort to reduce the stress placed on adolescents, in 1989 Korea abolished highly competitive entrance exams to middle and high school, replacing them with a general test of scholastic abilities for which students, in their fierce competition for success, study just as hard. The aptitude scores determine which high school a student may attend. Passing scores enable a student to go to a regular day-time high school, while low scores dictate attendance at an evening school and days in independent study. College applicants must still pass very rigorous entrance examinations.

Bearing the financial burden

The Korean government pays for every child to attend grades one through six, but parents must pay for middle and high school education, with middle school costing about $475 per year and high school tuition at a Korean national school roughly $800. Despite the costs and competition, approximately 99.2 percent of elementary graduates go to junior high school, and 90 percent of junior high graduates attend high school. Furthermore, when asked how far they expected to go in school, 86.3 percent of children in grades four through six said they planned to go through four years of college, and 52.3 percent expected to go to graduate school.

In the United States, high school students generally follow a core curriculum and then may choose electives. After school, they usually participate in sports, music and art activities, academic clubs, and so on. To find out what sorts of extracurricular activities Korean students participate in, we consulted with Dr. Ki Ok Kang, chief of research and development in mathematics education at the Korean Educational Development Institute. He laughed and told us that Americans have too many choices and that they tend to avoid taking a rigorous course of study in high school. Korean students, by contrast, have no elective subjects, usually attend a supplemental school that emphasizes mathematics, and study many hours beyond what their homework dictates. On a recent visit to the Moonil High School in Anyang, we learned from the principal that one-third of his students returned in the evening to participate in supervised study halls that schools voluntarily make available to their students. Additionally, prior to college entrance examinations, schools voluntarily ex-
tend their schedules three hours, to 10 hours a day. And so we had our answer to why math scores are so high—Korean students concentrate all day on studies and do not have the extracurricular distractions built into the American system. While some might argue American students gain from extracurriculars in leadership and other skills, the activities clearly detract from the academic program.

**Family involvement**

The Confucian ethic places great emphasis on scholarship and education, teaching that only persistence and hard work yield results, in school as well as life. It is the role of the family, usually the mother, to ensure that a youngster studies, and most Korean families take this responsibility very seriously. It is a matter of family honor for the son or daughter to succeed.

Korean students enjoy free time only on Sunday, when families habitually go on outings together. On Sundays, hundreds of young people participate in soccer, baseball, and other sporting events or join their families in picnic lunches on the banks of Seoul’s Han River. Many of the students have computers at home and enjoy computer games as a diversion in the middle of the school day. Vigorous individual and competitive athletics form part of the in-school physical education program.

Whenever we compare student achievement in foreign countries with that in the United States, we tend to forget that some of our schools have student populations speaking in excess of 70 original languages, that we do not live in a homogeneous society, and that we do not segregate our students by ability. We emphasize creative problem-solving in mathematics, for instance, while the Korean educational system stresses rote memorization, which pays off when students take the typical standardized test. Also, the urgency to succeed and the almost relentless family and social pressures are not without their toll on Korean students, as evidenced by the high suicide rate.

Nevertheless, the United States can find much to emulate in South Korea’s model of hard work and national commitment, with parents assuming partial responsibility for their youngsters’ educational success. Financial resources alone will not fix the problem. The mathematics and science curriculum at all levels must be strengthened, while ultimately the United States will have to accept longer school days and a longer school year, with a high school curriculum concentrating on basic subjects.

**No. 1 in self-esteem**

In a February 5, 1990 essay in TIME magazine, Charles Krauthammer wrote about the standardized test placing students in South Korea at the top. He highlights a little-known perspective. On the same test, there is a question, “I am good at mathematics.” American students were No. 1 worldwide in answering in the affirmative, with 68 percent. Korean students come in last in this category. Krauthammer goes on to say, “American students may not know their math, but they have evidently absorbed the lessons of the newly fashionable self-esteem curriculum whereby kids are taught to feel good about themselves.”

Will American parents stay up with their youngsters until the mathematics homework is complete? Will we offer evening television courses in mathematics to our students? Until our total commitment, starting with the family, is focused on President Bush’s goal of being No. 1 in mathematics and science, we will continue, in the words of Charles Krauthammer, “doing bad and feeling good.”. Our young people must be more like those in South Korea, where students are doing well and feeling bad, meaning working around the clock at being first.