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IS SOUTH KOREA A CASE OF HIGH-STAKES TESTING GONE TOO FAR?

At a Glance

South Korea's students consistently outperform their counterparts in almost every country in reading and math. Experts have concluded, however, that the South Korean education system has produced students who score well on tests, but fall short on creativity and innovative thinking. They blame these shortcomings on schools' emphasis on rote memorization and the country's use of a single university entrance exam as the sole determinant of success. While American educators and policymakers continue to praise the South Korean education system, South Korea has actually introduced a set of reforms designed to westernize its schools. Experts in both countries now believe that the most effective policies and practices from the U.S. and South Korean education systems should be combined in order to form one successful hybrid system.

South Korea's students consistently outperform their peers in almost every country in reading and math (Ripley, 2011; Weyant, 2011). Rankings by mean score on the 2009 Program for International Student Assessment (PISA) indicate that, in comparison to 64 other countries, South Korea placed 2nd in reading, 4th in math, and 6th in science. The U.S. ranked 17th, 31st, and 23rd on the three subtests, respectively. In addition, the percentage of South Korean students reaching the highest levels of reading proficiency on the PISA more than doubled from 2000 to 2009 (OECD, 2010). According to the OECD (2010), 93 percent of South Korean students graduate on time from high school, while the U.S. has an on-time graduation rate of 72 percent.

Experts now recognize, however, that the South Korean education system ignores student diversity and produces students who score well on tests but fall short on creativity and analytical thinking. They are also starting to wonder if high levels of achievement justify the intense emotional and physical stress experienced by many South Korean students (Jae-yun, 2011; Reborra, 2011; Ripley, 2011). Pellissier (2010) questioned: "Should the U.S. emulate South Korea by vastly increasing the number of school days and adopting its other educational practices? If higher test scores and graduation rates are the goal, the logical answer would be yes. But a deeper look at the South Korean model suggests that its success comes at a price."

Major differences between the educational systems in South Korea and the U.S. include:

- Unlike the U.S., where curricula are established at the state level, South Korea has a national curriculum. The Ministry of Education, Science, and Technology has overall responsibility for the curriculum, which prescribes the range and content of subjects to be offered at each grade level, the time allocation for each subject, and criteria for the development of textbooks (International Review of Curriculum and Assessment Frameworks, 2011; Spira, 2011; Kang, 2009; Lynch, 2008).

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- Most U.S. schools emphasize students' creativity and ability to analyze and solve problems, while Asian education tends to focus on discipline and rote memorization (School of Translation and Interpreting, 2011a).
- In the U.S., schools vary significantly in quality. Student performance across schools is highly inconsistent, with some schools in low-income districts lacking sufficient resources to fund quality instruction and resources. Educational resources are spread much more evenly among schools in South Korea (Lynch, 2008).
- South Korean classrooms are larger than American classrooms. The Asia Society (2011) reported that South Korean class sizes range from 37 to 50 students. According to data collected by the Organisation for Economic Co-operation and Development (2011), South Korean secondary school classrooms have 35.3 students on average, compared to 23.2 in the U.S. At the elementary level, South Korea has an average of 28.6 students per classroom, while the U.S. average is 23.8 students.
- South Korean students attend school 220 days per year. American students attend school 180 days, or 40 fewer days per year (Pellissier, 2010).
- Although beginning teachers in America actually earn higher starting salaries than beginning South Korean teachers (about \$6,000 more per year at both the elementary and secondary levels), experienced South Korean teachers earn significantly more than their American counterparts. At the elementary level, South Korean teachers at the top of the pay scale earn \$33,017 more per year than U.S. teachers (\$84,650 versus \$51,633). At the secondary level, South Korean teachers at the top of the pay scale earn \$29,804 more than U.S. teachers (\$84,529 versus \$54,725) (Organisation for Economic Co-operation and Development, 2011).
- Until recently, corporal punishment was used to discipline South Korean students and push them to excel. One survey found that 70 percent of high school students reported that they had experienced corporal punishment. Seoul, South Korea's largest school district, banned corporal punishment in November 2010 and the policy was banned nationwide in March 2011 (Ha-Won, 2011; Ripley, 2011).
- The U.S. has almost 7,000 postsecondary educational institutions and programs (U.S. Department of Education, 2012). In contrast, there are only about six or seven prestigious South Korean universities. Performance on a culminating national university entrance exam is the sole determinant of which university a student can attend. Students' academic careers are dedicated entirely to earning high enough scores on the university entrance exam to gain acceptance into one of these top universities (Ripley, 2011; Shin, 2011; Spira, 2011).

What most distinguishes South Korean students from their American peers, however, is the extensive number of hours they spend studying outside of the classroom. The majority of South Korean students spend their after-school hours obtaining additional academic instruction at privately-run educational academies, called *hagwons*. After a typical eight-hour school day that begins at 8 a.m., most students spend their remaining waking hours (often until midnight or 2 a.m.) attending *hagwons* and reviewing their school work (Li, 2011; Ripley, 2011; Shin, 2011; Pellissier, 2010; Lynch, 2008).

In 2010, 74 percent of all South Korean students attended *hagwons*. South Korea's Ministry of Education, Science and Technology (MEST) counted 95,000 *hagwons* and 84,000 individuals providing tutoring services. There are more private *hagwon* instructors in South Korea than there are school teachers. According to MEST, enrollment in *hagwons* is highest among high school students. In 2010, 84 percent of high school students, 50 percent of middle school students, and 45 percent of elementary students

enrolled in *hagwons* (Li, 2011; Ripley, 2011; Shin, 2011). A study of 1,752 middle and senior high South Korean students found that students were most likely to engage in private tutoring (at a *hagwon* or through informal private instruction by a university student) in math (52 percent), English (41 percent), and Korean (30 percent). Weekly tutoring hours were longest for math (2.5 hours), followed by English (1.7 hours), and Korean (1.3 hours) (Kang, 2009).

South Korean families spend an average of \$2,600 per year for each child to attend a *hagwon*. Families with higher incomes often spend up to \$1,000 per month on *hagwons* (Ripley, 2011; Spira, 2011; Myo-ja, 2008). Kang's (2009) study of middle and senior high school South Korean students found that a 10 percent increase in expenditure on private tutoring led to a 0.56 percentile point improvement on the national university entrance exam. This estimated effect was modest, equivalent to a 1.1 percent increase in test score.

Originally, *hagwons* were designed as an auxiliary to the school curriculum. However, South Korean students increasingly rely more on after-school instruction than school teachers to prepare them for the university entrance exam. Chung (2002) speculated that *hagwons* are perceived as more beneficial to students "either because the level of learning for the tests is too high or the level of teaching at schools is mediocre, or both." Ripley (2011) reported: "When I visited some schools, I saw classrooms in which a third of the students slept while the teacher continued lecturing. Gift stores sell special pillows that slip over your forearm to make desktop napping more comfortable. This way, goes the backward logic, you can sleep in class - and stay up late studying."

Most experts believe that the South Korean approach to education has serious flaws. Relentless pressure and long hours, followed by a test that is regarded as the sole determinant of future success, have produced unintended consequences in South Korea, including:

- Students' chances of being admitted to a top university are often determined by their parents' ability to pay for after-school instruction. The high cost of *hagwons* discriminates against families who can't afford the additional instruction (Sang-Hun, 2009; Myo-ja, 2008). As a percentage of the economy, South Korean families spend three times as much as Americans on education (excluding college, where Americans spend fractionally more). This discrepancy exists because of the large amounts of money South Korean families pay to *hagwons* (Lynch, 2008).
- The examination-centered education system emphasizes rote learning instead of creativity and innovation (Li, 2011; MacKenzie, 2011). Richard Freeman, economics professor at Harvard University, stated that South Korea's schools "churn out more or less identical industrial-age drones" (Lynch, 2008). Jae-yun (2011) concluded: "In the process of standardized education, the differentiation of talents between students is largely neglected. This is the result of a uniformed way of thinking without considering diversity."
- Formal learning monopolizes all of students' time. Students have little or no time for recreational or enrichment activities, such as sports and arts. Many high schools lack modern gymnasiums or sports teams (Jae-yun, 2011; School of Translation and Interpreting, 2011b; Pellissier, 2010).
- South Korean high school seniors often sleep only four hours per night for several months leading up to the university entrance exam (Pellissier, 2010).
- Societal, family, and peer pressure to succeed academically takes a heavy emotional toll on students. South Korea's student suicide rate is among the world's highest. A 2008 poll of South Korean students found that 59 percent reported that they had contemplated suicide (Jae-yun, 2011; Ripley, 2011; Pellissier, 2010).

- An education system focused on one outcome - high scores on the university entrance exam - results in high levels of competition among students. When students don't collaborate with their peers, they are deprived of opportunities to learn basic social skills, such as cooperating with others, negotiating group dynamics, and managing rivalries (Jae-yun, 2011; School of Translation and Interpreting, 2011b).
- Many South Korean students attending universities in the U.S. are not prepared for university work. Pellissier (2010) reported that 44 percent of South Korean students drop out of top U.S. universities. That exceeds the dropout rate for students from the U.S. (34 percent), China (25 percent), and India (21.5 percent). He concluded that the main reason for this lack of success is that the rote learning in South Korean schools does not prepare students for the creative, active, and self-motivated form of learning required at U.S. universities.
- Some educational reformers argue that the high cost of *hagwons* is one of the reasons South Korea's birth rate has fallen to the lowest of any industrialized country - 1.1 children per woman aged 15-49 (Ripley, 2011; Shin, 2011).

The South Korean government is keenly aware of these difficulties and has introduced reforms designed to create a more "western-style" education system. At his 2008 inauguration, President Lee Myung-bak stated: "One-size-fits-all, government-led uniform curriculums and an education system that is locked only into the college-entrance examination are not acceptable" (MacKenzie, 2011; Rebor, 2011; Ripley, 2011). Government reforms include:

- The most recent South Korean National Curriculum emphasizes individual talent, creativity, and knowledge of Korean culture as well as other cultures (Asia Society, 2011; Spira, 2011).
- A 10 p.m. curfew has been imposed on all *hagwons*. Police crack down on *hagwons* that stay open beyond the approved operating hours. The government even offers a financial reward to citizens who report *hagwons* that are not complying with the curfew (Li, 2011; MacKenzie, 2011; Ripley, 2011; Spira, 2011).
- Admissions tests for prestigious, specialized high schools have been eliminated (Ripley, 2011).
- Corporal punishment, a formalized ritual in South Korean schools, is now prohibited. Students who violate school regulations are instead required to take special education classes or conduct in-school and community service (Ripley, 2011; Education Week, 2010).
- Teachers and principals now undergo a rigorous evaluation process which includes surveys by students, parents, and peer teachers. Additional training is required for low-rated teachers (Ripley, 2011).
- Admissions officers have been appointed to South Korea's universities to judge applicants based on criteria such as interviews and portfolios illustrating practical competencies, in addition to test scores (Li, 2011; Ripley, 2011).

Despite the difficulties associated with the South Korean education system, many American policymakers encourage our schools to become more like those in South Korea. In his 2011 State of the Union address and in speeches to classrooms around the country, President Barack Obama has held up South Korean schools as a role model for the U.S. education system, praising South Korean parents' active involvement in their children's education and the level of respect accorded to teachers. He has urged the U.S. to emulate South Korea by adopting longer school days and after-school programs for American children (The Korea Times, 2010; 2011).

Obama's remarks came as a surprise to many South Koreans because their education system has recently come under increasing criticism for its lack of creativity and heavy dependence on private instruction. One South Korean blogger noted: "It's good to be complimented. But I fear his frequent compliments on Korean education might mislead some South Korean politicians to really believe that the Korean educational system is good enough" (The Korea Times, 2010). In his opinion piece for *The Korea Times*, Jae-yun (2011) stated that "both the students and parents have fallen prey to stressful lives and huge costs for private education. In short, Korean people face a hellish situation in terms of education and that is the very reason why Americans might not envy the Korean education system despite Obama's repeated acclamations."

Most experts believe that combining elements of the U.S. and South Korean education systems would be most effective. They suggest that elements of each country's education system be critically evaluated, with the most successful policies and practices combined into one successful hybrid system. Qiang Zha, a professor of education at York University stated: "We need a combination [of the two education systems]; we need a balance. Good innovation should be based on a solid knowledge base" (Li, 2011). Similarly, Richard Freeman, economics professor at Harvard University concluded: "Probably some mix between the Korean and American ways would be ideal" (Lynch, 2008).

Summary

South Korea's students consistently outperform their peers in almost every country in reading and math. Experts now recognize, however, that the South Korean education system, with its emphasis on rote memorization and use of a single university entrance exam as the sole determinant of success, has produced students who score well on tests, but fall short on creativity and innovative thinking. They are also starting to wonder if high levels of achievement are worth the intense emotional and physical stress experienced by many South Korean students. In addition, the South Korean education system has produced educational inequality because children of parents who can't afford after-hours academic instruction are left behind. Students have little or no time for recreational or enrichment activities and many experience high levels of anxiety and depression.

While American educators and policymakers continue to praise the South Korean education system, South Korea has actually introduced a set of reforms designed to westernize its schools. The most recent national curriculum emphasizes individual talent and creativity; the government has imposed a curfew on after-hours, privately-run educational academies; and entrance to the country's universities are based on criteria such as interviews and portfolios in addition to test scores. Experts from both countries now believe that a combination of the most effective U.S. and South Korean policies and practices would create a successful hybrid education system.

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