

Does art matter in education?

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29 April 2014

Part 1: Introduction

In the United States the value of art programs in schools across the nation is diminishing. Whether it is through the elimination of art teacher positions, a dwindling supply budget or a reallocation of funds to other subject areas, the monies budgeted to the arts in schools drops each year. As art programs recede there is also a downward trend in the achievement of U.S. students across the board on the Program for International Student Assessment or PISA. PISA is a test administered internationally that measures fifteen year old students' performance in math, science and reading. As one of the leading developed nations, why are we being surpassed educationally by less developed nations? What is the U.S. educational system lacking that makes its students incapable of competing at the same level of other nations? The U.S. needs to look to other nations with successful and high-achieving educational systems and learn from them in order to create an education system that allows all students to thrive in the 21st century. The reduction of arts programs in U.S. public education is eliminating ingenuity and creative outlets in schools, leaving students unprepared to succeed in a 21st century environment.

Part 2: Historical Context

The U.S. system of public education took shape during the Industrial Revolution when our nation desperately needed workers to cope with the increasing demand of industry. This system was designed to create workers; people who could accomplish tasks and help sustain booming industries. It was intended to cater to the needs of the growing industrial field and since then has changed minimally in ways that seek to better appease companies. The world has changed significantly since this system was

devised, and the model that the U.S. has been functioning under is no longer providing everything needed, nor is it cost-effective.

The U.S. is vastly outspending the majority of countries in education each year per pupil, yet continues to have average to below average results on the PISA. The Organisation for Economic Cooperation and Development {OECD} is a group of developed nations that function under a democratic government structure and a free economy (Organisation). In 2007 the OECD average spending per upper secondary (high school) student was \$8,746. The average OECD PISA results from 2009 were: 493 on reading, 496 on mathematics, and 501 on science. In 2007 the U.S. spent \$11,788 per upper secondary student. On the 2009 PISA the U.S. average PISA scores were: 500 on reading, 487 on mathematics, and 502 on science. In 2007 the U.S. spent \$3,042 per student and on the 2009 PISA scored only seven above average on reading, In 2007 Finland spent an average of \$6,806 per upper secondary student, and had average PISA scores of: 536 in reading, 541 in mathematics, and 554 in science. South Korea spent an average of \$9,620 per upper secondary student in 2007 and had average PISA scores of: 539 on reading, 546 on mathematics, and 538 on science {See Figures 1 and 2}. U.S. spending per pupil has vastly exceeded not only the average for OECD nations but also the spending of top achieving nations, with little impact in terms of test scores.

The recent U.S. economic recession has led to reductions in art budgets. When the impacts of budget cuts trickle down to individual school districts and schools, administrators quickly look to art rooms. The most typical place for budget cuts to take effect is in art classrooms, whether that be cutting the budget for art supplies, reducing full-time positions to part-time, cutting down the number of classes, or closing the art room doors entirely. And while

art is a core subject under the Federal No Child Left Behind law, it is rarely given the same protection from spending cuts offered to math, science, english, and social studies. Yet the reaction to the reduction or cancelation of art programs has been enormous. The pushback on these decisions has come from students, researchers, teachers, parents, education professionals, theorists, and even some policy makers as people continue to advocate for the presence of art programs in schools. So while leading government workers and budget writers slash their pens through the word art as though it is of little importance, individuals and groups alike are speaking up to say that art is valuable and that it should continue to be in schools and the lives of students.

Part 3: Summary of Past Research

There are many different opinions regarding the presence and value of art programs in schools. Some believe that art is not where we should be focusing our effort in education, while others believe that art has value as an independent subject. Other visionaries think the key to successful education is to integrate art across all subjects, and internationally high-achieving nations South Korea and Finland find other ways to incorporate art into education.

One argument is that core academics should be the main priority of education and art is taking away from that focus. Nadia Abramson believes that, “school is supposed to be an academic environment. But the arts have somehow infested the hallways and taken thousands of students hostage with pretty colors and soothing sounds (Abramson 1). Abramson also argues that, “The arts, which are a required credit in many schools, distract students and create wannabe starving artists, who skip class...or never leave the art room” (Abramson 1). The presence of art in schools is taking students attention away

from what should be their main focus, academics. Schools should redirect their focus away from extracurriculars (Abramson 1). It is not as though “if schools do eliminate art programs, students will... suddenly be deprived of a creative outlet. If they truly care about whatever it is they do, there are plenty of places to go after school” (Abramson 1). Several students and policy makers believe there are plenty of opportunities to get involved in art outside of school. Policy makers also have to evaluate the financial ability to provide arts.

Another factor impacting the public education system is the 2009 recession that has led to an immense cut in the budgets that are allocated to school districts and individual schools. Schools are struggling to make ends meet and provide basic classes under the current budgets. As one superintendent said, “nearly \$500,000 of the \$5.4 million in cuts for 2008-09 will come from art programs. While art is a core subject, it is not formally measured for ‘adequate yearly progress’ under No Child Left Behind. ‘We have to attend to the things we are being tested on and being measured on,’ he said” (Russell 3) Even though art is a core subject under the No Child Left Behind law it is unlike reading, math or science in that it does not have a high-stakes test associated with it through which the students’ ability or knowledge is assessed in order to obtain more monies and larger budgets. (Russell 2) Due to the economic status of the United States money for education must be focused to where it is most important.

Some analysts believe that reading, math and science should be the focus in education. These people prioritize subjects based on budgets but also strongly through testing results because, “only 3 out of 10 of our students {are} reaching standards in literacy and math at the end of eighth grade”(Herszenhorn 2). “‘ As important as music and art are, and I believe they are important,’ Schools Chancellor Joel I. Klein said in an interview... ‘I don’t think we are going to succeed if we continue to have 70 percent of our students going into high school unprepared’”(Herszenhorn 1). While the United

States is slipping lower and lower in science, reading and math, “a report recently published by Harvard University’s Program on Education Policy and Governance found that students in Latvia, Chile and Brazil are making gains in academics three times faster than American students,”(Best 2). At the same time students, “in Portugal, Hong Kong, Germany, Poland, Liechtenstein, Slovenia, Colombia, and Lithuania are improving at twice the rate,” of American students (Best 2).

While some believe that art does not belong in schools, several researchers and educators have been cited regarding the benefits that art can have for students. Author David Gullatt has found that “Over the past 10 years prominent theorists and practitioners such as Caterall, Eisner and Gardner have begun to argue that the arts are integral to the education of the ‘whole child’” (Gullatt 12). There have been several “noted theorists {that} have recognized and supported the lifelong benefits that the arts have provided students as they became adults”(Gullatt 12). Developments in cognitive science have shown that the emotion and personal connection generated in people through art helps people to connect cognitively and logically to the material they are seeing or learning (Gullatt 14). Arts integration has been noted by educational experts to “serve a positive role in assisting with the teaching and learning process” (Gullatt 13). The “implications {of arts integration} for the educational profession are {the promotion of} the concept that teachers are facilitators of learning and not dispensers of knowledge, allows students to more deeply understand by doing and becoming more involved in the learning process” (Gullatt 23). Other implications include the encouragement of different learning and teaching approaches, engaging communication, better reasoning skills, expansion of curriculum, and allow a way to promote and encourage diversity and multiculturalism (Gullatt 24).

In the article “A Recipe for Artful Schooling,” author Eric Booth said that art should not be perceived as a “special sauce” for education, but rather as a set of valuable and necessary “main

courses” (Booth). The “main courses” that art provides in education are intrinsic motivation, the skills of creativity, and inquiry based learning. Art teaches students how to be self-motivated, to foster students’ creativity and to base their learning on the goals of solving problems and answering the questions around them (Booth). Included in the perceived need for arts in schools is a shift in the perception and definition of the term art. Booth also argues that art is a verb and should represent an action of doing something or having a skill. He also believes that we should have an “inherent understanding that every worthwhile endeavor raised to a high level of expression becomes a work of art” (Booth 24). If anything can become an art form, then art is in everything. Art integration programs utilizes the idea that art is in everything by using art in all different subjects to help students think about things in new ways and express their thoughts and ideas.

Some schools have found success in implementing arts integration. Art integration can take many forms, “students at South Carolina’s Beaufort Middle School {who} are learning about cell structure from an artist who draws for scientific journals” (Sternberg 44). Art integration is also helping teachers to better evaluate their students’ gains and losses through creating “data walls” that show display students’ work and give teachers a way to evaluate growth in ways other than just test scores (Sternberg 44). Cleveland’s Newton D. Baker School of the arts encourages the use of art in all subjects, whether that be through visual expression, music, or writing, and Baker students have some of the highest scores in Cleveland on standardized tests (Sternberg 45). While some U.S. schools like Baker have been successful on standardized tests, as a nation the U.S. scores poorly.

According to a report by Pearson, an education firm, Finland and South Korea top the list of developed nations in regards to education systems. The “rankings are calculated based on various

measures including international test scores, graduation rates between 2006 and 2010, and the prevalence of higher education seekers” (Best 1). Based on the aforementioned criteria, the United States places 17th among developed nations. A study by Pearson found that “while funding is an important factor in strong education systems, cultures supportive of learning is even more critical – as evidenced by the highly ranked Asian countries, where education is highly valued” (Best 1). The Pearson study also pointed out that strong education systems exist in places where there are high-quality teachers and strong, purposeful recruiting of teachers. South Korea embraces many of the traits that Pearson identifies.

One of the top-performing public education systems in the OECD is found in South Korea. South Korea has a very rigorous education system. Students spend an average of 13 hours a day studying and 220 days in school a year (Clark 2). South Korea has six years of primary school, 3 years of middle school and 3 years of high school, with the option of a 4 year college education (Clark 5). In the South Korean education system, “the first nine years of schooling are compulsory for children between the ages of six and fifteen; however, school attendance is close to universal all the way through to the upper secondary level” (Clark 5 and 6). South Korean children are in general very successful in school and that “is often attributed to significant parental investment in after-school classes and other forms of private or additional tuition outside of the public school system”(Clark 2). South Korea has a “highly motivated and educated populace” (Clark, 2) and an adult literacy rate of 97.3% (Clark 1). South Korea is fostering a cultural appreciation and respect for education. You can see the value placed on education in South Korea in that they have the highest tertiary {college} enrollment of any nation (Clark 1). However, this nation places 24th out of 30 nations (Clark 2) for a PISA criterion known as study effectiveness. Finland is ranked first for study effectiveness and spends substantially less time in school and studying than

Korean students (Clark 2). While the Korean system is highly successful through its structured program, the education system in Finland is exploring a more flexible path to success.

Another top performing education system is the Finnish model. On a global comparison, “Finland was not succeeding educationally in the 1970s, when the United States was the unquestioned education leader in the world. Yet this country created a productive teaching and learning system by expanding access while investing purposefully in ambitious educational goals” (Darling 1). The Finnish school system was reformed with the intention of providing “resources for those who need them most, high standards and supports for special needs, qualified teachers, evaluation of education... {and a balance of} decentralization and centralization”(Darling 2). Starting in 1972 Finland worked to stop tracking kids into classes based on test scores and by 1982 had eliminated the tests themselves (Darling 3). Another facet of the Finnish school reform was a stronger focus and investment in teachers through improving and extending the education required to become a teacher (Darling 3). “The focus of the 1990s curricular reform was on science, technology, and innovation, leading to an emphasis on teaching students how to think creatively and manage their own learning” (Darling 3). “Finland considers the arts to be vital and weaves it through their entire education system.”(Ianchia, 1) The Finnish culture is one that is working to foster a love and appreciation for learning and the educational process. In Finland,

More than 99 percent of students now successfully complete compulsory basic education, and about 90 percent complete upper secondary school. Two thirds of these graduates enroll in universities or professionally oriented polytechnic schools. More than 50 percent of the Finnish adult population participates in adult education programs. (Darling 2)

A cultural appreciation for education is evidenced by the training and expectations and respect placed on teachers in the public school system. “Prospective teachers are competitively selected from the pool of college graduates – only 15 percent of those who apply are admitted – and receive a three-year graduate

–level teacher preparation program, entirely free of charge and with a living stipend” (Darling 4).

Finland also has a unique approach in their societal view of teachers. Teachers are seen as professionals who have space for innovation and know how to improve the learning environment (Darling 3). Finland has also worked to incorporate art into their school systems both through art classes and through integration into other subjects. The importance of art in Finnish education echoes through classrooms, schools, districts, and the entire nation.

From a small individual school scale to a large national scale, Finland is seeking to create a successful and art-filled education system. Finnish “legislation stipulates that basic education in the arts must be provided either by educational institutions or arranged in other ways” (Ianchia 1). Finland is seeking to approach education from a long-term view. Instead of putting extra value and emphasis on STEM {science, technology, engineering and mathematics} subjects like many other developed nations, “Finland considers the arts to be vital and weaves it through their entire education system” (Ianchia 1). The Finnish system promotes the integration of art into classrooms through innovative teaching techniques and allowing teachers to teach to the needs and learning styles of their students. The goal of arts education in Finland is to allow students to affect the values in society, and society as a whole through their knowledge of arts (Ianchia 2). Art, “education must develop students’ capacity for creative problem solving. Pupils should learn to express themselves and to master materials and technology” (Ianchia 1). The purpose of education is to develop skills and abilities in students. The curriculum for Visual Arts, including Architecture, Visual Arts and Crafts, is a set of lean standards that convey basic skills and goals that should be imparted to students upon the completion of a program or class.

Part 4: Findings and Analysis

Based on this growing body of research and analysis, The U.S. is simply not thriving in terms of education comparatively. An earlier referenced report showed students in less developed nations gaining academic ground far faster than American students (Best 2). The United States was also identified by Pearson to not even rank in the top ten globally for education (Best 1). While the U.S. is not at the bottom of the rankings for educational achievement {see figure 3} they are certainly not topping the charts. As a nation who thrives on continually making progress, the U.S. should not be satisfied with a mediocre public education system that is producing students who are unable to compete in a twenty-first century environment. Not only is the U.S. falling short when compared to other OECD countries but it is falling short on meeting its own state and national standards. U.S. students are falling behind in reading and math and instead of finding alternate ways to engage them in those subjects they are required to spend “18 periods – more than half of the 35 instructional periods in a typical week –{on}reading and math”(Herszenhorn 1). The United States is seeking to improve their educational system through a stricter model and ignoring the evidence that a more flexible and malleable model can lead to greater success.

As a nation we continue to look to other countries that are thriving educationally, yet we refuse to evaluate their teaching and learning techniques and integrate them into our own public education system. In the 1970s the United States was an obvious world leader in education and far outranked Finland. But over the past four decades Finland has worked to create an education system that is productive, accessible, and ambitious (Darling 1). Yet while Finland has made massive gains and become one of the leading education systems in the world the United States’ investigation and understanding of this system and curriculum is limited. Why are we seeing other countries be successful in education and not investing time in figuring out why they are making gains and the U.S. is not?

South Korea is also highly successful educationally. The success of the Korean education system is typically linked to the high parent involvement found in Korean schools (Clark 2). Another contributing factor to the success of the system is the sheer quantity of time that Korean children spend in school, an average of 220 days each year (Clark 2). Pearson found South Korea to have one of the best K-12 education systems “based on international test scores, graduation rates, and the prevalence of higher education seekers (Clark 1). The South Korean school system is fairly structured and intensive, with students spending an average of 13 hours per day either in school or doing school related activities {ie: homework, tutoring}. While primary school and middle school are required, “school attendance is close to universal all the way through to the upper secondary level” (Clark 5 and 6). The South Korean education system has several strengths including PISA testing success, a highly educated population, and a cultural appreciation for education. The Korean school system also incorporates art both culturally and as a required course for upper secondary school.

Finland has rapidly ascended to the top of the chart of rankings of OECD nations whereas in the 1970s it was indistinguishable from global education systems (Darling). The Finnish public school system has utilized a more free-form and flexible educational model. Focusing on improving teacher education and creating minimalistic national standards has developed an education system that allows for a large amount of classroom and school autonomy. “Most visitors to Finland... recognize the large autonomy that schools enjoy, {and} little interference by the central education administration in schools’ everyday lives” (Darling 2). By trusting teachers as professionals capable of running a classroom and educating children, Finland is allowing teachers to experiment and find ways to teach to the needs of each of their students and the result is that students are prospering and finding great educational drive and success. Finland’s philosophy towards teachers is as follows:

Empowerment of the teaching profession produces good results. Professional teachers should have space for innovation, because they should try to find new ways to improve learning. Teachers should not be seen as technicians whose work is to implement strictly dictated syllabi, but rather as professionals who know how to improve learning for all. (Darling 5)

By treating teachers like the professionals that they are, there is a greater appreciation for teachers and the teaching profession which is in turn fostering a higher value of the education process in general. The Finnish system is also growing a cultural appreciation and value for education. They have 90 percent of their students completing non-compulsory upper secondary education (Darling 2). And a majority of the Finnish adult population is involved in an adult education program (Darling). There is also a strong appreciation for and utilization of creativity in Finnish schools. With legislation requiring the availability of art programs to students (Ianchia), you can see the value that art holds in the educating of students. Art is treated as a substantial subject with its own guiding national curriculum. However, the Finnish education system recognizes the need for teachers to have freedom in their classrooms, particularly art classrooms. The curriculum is a set of skills and abilities that students are intended to walk away with instead of a strictly designed lesson plan. Art “education must develop students’ capacity for creative problem solving. Pupils should learn to express themselves and to master materials and technology” (Ianchia 1). The art curriculum and the value of art in Finnish education are helping to create a successful educational model.

The Finnish education model is clearly a successful and working system. The success of the Finnish school system is evidenced by their rapid ascension to the top of the chart of rankings based on PISA scores. {See figure 3} Finland also excels on the PISA in terms of between school variance, “Finland’s between-school variance on the PISA science scale was only 5 percent, whereas the average between-school variance in other OECD nations was about 33 percent (Darling 2). Between-school

variance is the average difference in test scores from one school to another and is typically accounted for by socioeconomic inequality. Finland also has a very high immigrant population with students speaking, “more than 60 languages. Yet achievement has been climbing in Finland and growing more equitable” (Darling 2). The respect for the teaching profession allows teachers the space they need to mold their classrooms and teaching to fit the needs of their students. This model is one that is built on a value of creativity. Creativity and creative approaches to learning are utilized throughout the Finnish system. Finland focuses on not telling teachers how to teach but trusting them to know how to educate and engage their students. Teachers are given the freedom and the flexibility to be able to teach “wood mathematics” where students are taken outside and taught to subtraction and addition by counting sticks or stones (Vasagar 2). There is also a strong emphasis on art and the ability to use art to extend learning and look at material in new and creative ways (Ianchia). With a 95 percent high school graduation rate (OECD) {See figure 4} and a 100 percent adult literacy rate (World) {See figure 5}, few can claim that Finland’s education system is not successful.

Part 5: Conclusions

In the movie “Particle Fever” Savas Dimopoulos said, “Why do humans do science? Why do they do art? The things that are least important for our survival are the very things that make us human” (Feder). Art and science make us who we are. They are crucial to our identity as individuals and as a global society. Art matters because it inspires people, it pulls people out of their comfort zones, it pushes the boundaries of what is seen and understood, it helps people interpret the world around them, and it helps people express themselves to others and themselves. Art unlocks different parts of the brain and connects people to each other and their surroundings. People make sense of the world through artistic

expression. Art is crucial to our humanity and it is for that reason that art should be prevalent in education.

Art is a valuable aspect of education. Art fosters and encourages a creative approach to educating students across all curriculums, but art also is a valuable educational aspect in and of itself. Art helps keep students interested, involved, and invested in school. It has been found that, “in tough schools with good arts programs it’s no surprise to find suspended students sneaking back into school for their arts activities” (Booth 2). Many students find themselves motivated and inspired in school through art programs. In continuation schools {or schools intended for “at risk students”} and in traditional schools, a presence and value of art programs can lead to increased attendance, increased academic performance, increased student growth, and increased student commitment and involvement in school and school related activities. Art is helping to motivate and inspire students that are typically written off as “at risk” or challenged or disinterested to reach new educational heights. The positive effects of art has in schools is undeniable.

High-achieving nations like South Korea are interested in utilizing art in their already successful school systems. If a nation that is not lacking for educational success is seeking art, then clearly it is something that has value to it. Requiring art as one of the ten compulsory courses for upper secondary {high school} students indicates the importance of art in terms of successful and comprehensive education. Finland is also a very high-achieving and successful school system that is not only functioning but thriving on an education model that emphasizes individuality, school autonomy, minimal external/high-stakes tests, and an incorporation and integration of arts education into schools and curriculum. Having progressed from a mediocre place in global education to one of the leading nations in the world demonstrates the success of the Finnish approach to education. The combination of

improved teacher training methods and cultivation of a cultural appreciation for education and the teaching profession have led to the trusting of teachers to be good at teaching and to understand how to run a classroom. The increase in teacher education also created a more productive system in that policy makers feel confident in teachers' ability to be "facilitators of learning" (Gullatt 24). This allows for the creation of very minimalistic national standards that focus on skills and goals for students instead of a strictly detailed lesson by lesson curriculum. The minimization of standardized tests prevent the trend of "teaching to the test" that is occurring in nations that regularly use a high-stakes testing approach to measure and assess learning. Yet while standardized tests are far from the norm in Finland, Finnish students excel on the few standardized tests they do take, including the PISA, because they education system is fostering strong and intelligent students.

Meanwhile, the United States is lagging behind many other developed nations in education and student achievement. We live in a time and era that requires and is fueled by people who think outside of the box and who stretch the bounds of what is possible. Our current public education system is not supporting this need and is in fact a system that is designed around our country's past needs instead of our current ones. The original purpose of the U.S. education system was to prepare people in the easiest and simplest way possible to become good workers. It is a system designed to impart basic skills and prepare people to be worker to fuel the Industrial Revolution. This system was not designed, nor has it been altered to meet our nations changing needs. What our nation and world needs now is visionaries, people who are creative and inspired and can see problems and the world in a unique light as they seek to continue progressing forwards and solving problems. If the United States wishes to compete on a global educational scale we need to update our education system to meet those goals.

Many of the implications of this research are still to come. This society and age is one that is constantly pushing boundaries, pushing limits and making progress, and the public education system should be imitating our society in that it should be constantly moving forward and progressing to further prepare generations of students for the future that they will be living and hopefully thriving in. The United States needs to update their public education system to reflect the knowledge, skills and abilities that need to be imparted upon students. The U.S. also needs to find a more sustainable and cost effective model, but budget cuts to education cannot come from art rooms. With everything that is going on with the reduction and cancellation of art programs in schools there is much more push-back on the decisions to make cuts than there is support or advocacy for the continuation or advancement of budget cuts. Based on the extraordinary growth and success that is being seen in Finland, the United States look further and more in depth into the Finnish education system and how that knowledge can help to refine our own education model. In order to prepare U.S. students to succeed in the 21st century, the United States must cease cutting art programs and budgets and instead needs to look to art integration and stronger art programs. It must be kept in mind that education cannot simply equip students to meet the needs of yesterday's world or even today's, education should be equipping students to meet the needs of tomorrow.

Appendix:

Figure 1: Program for International Student Assessment (PISA) Scores

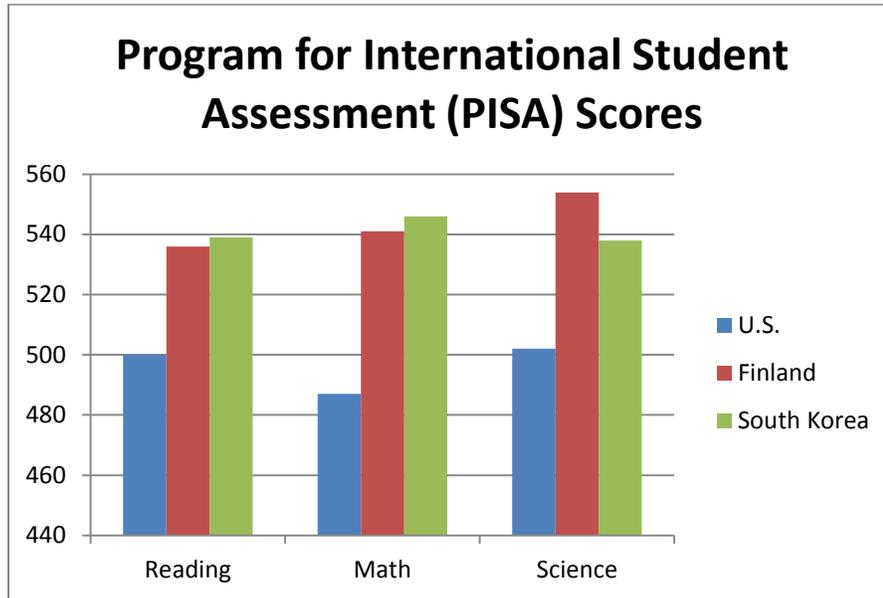


Figure 2: Spending Per Upper Secondary Student by Country

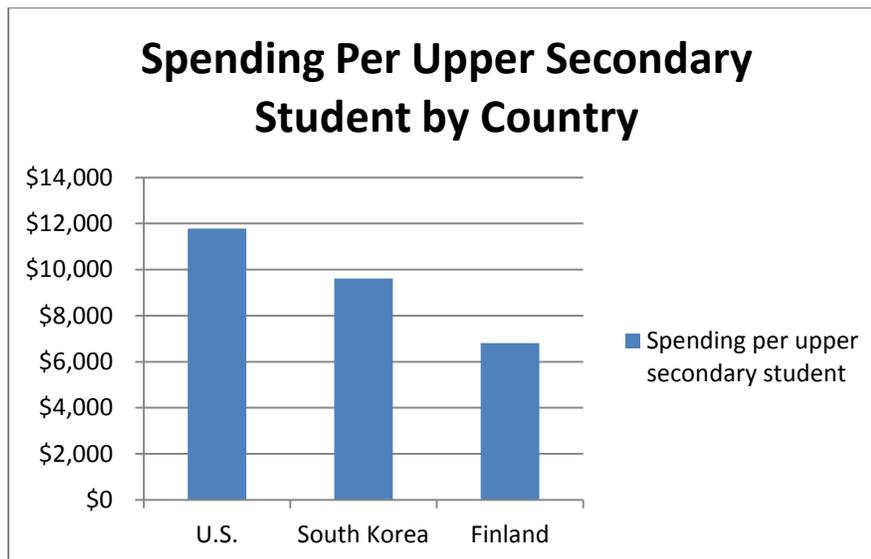
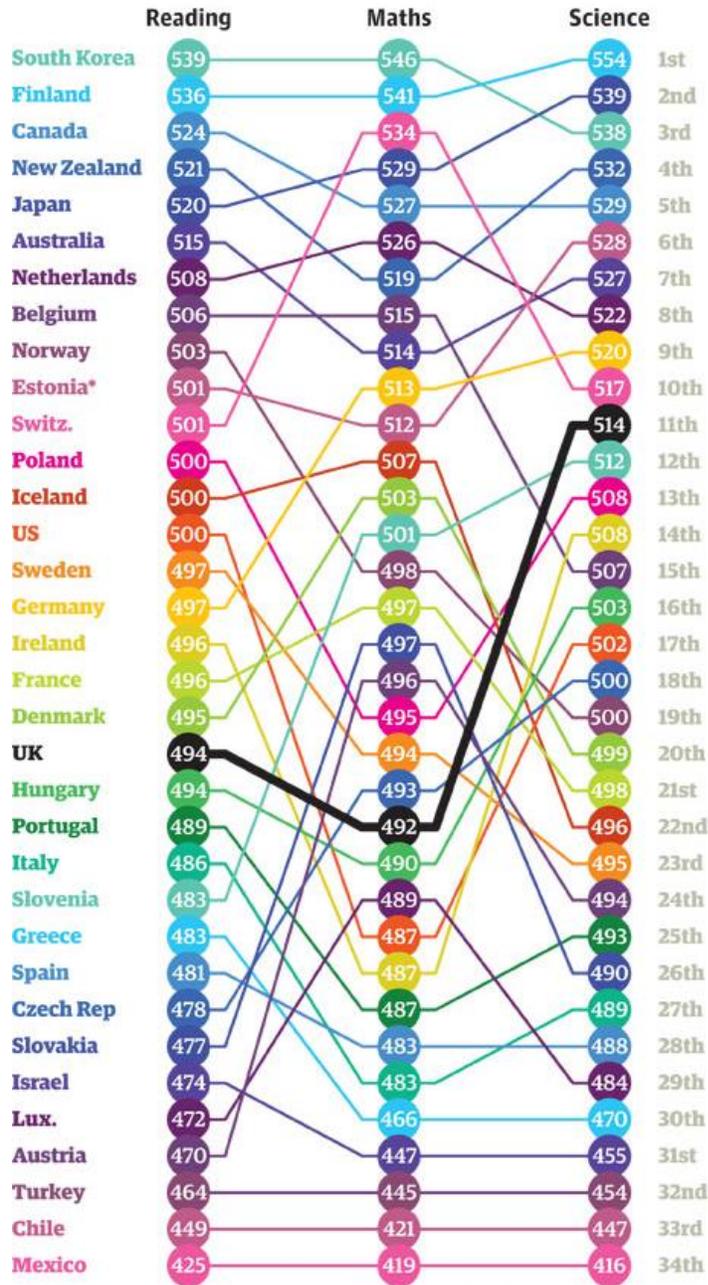


Figure 3: PISA Scores and Overall Ranking Among OECD Nations



SOURCE: OECD PISA 2009 DATABASE. RANKING IS JUST WITHIN OECD COUNTRIES. *MEMBERSHIP PENDING

Figure 4: High School Graduation Rate (Percent)

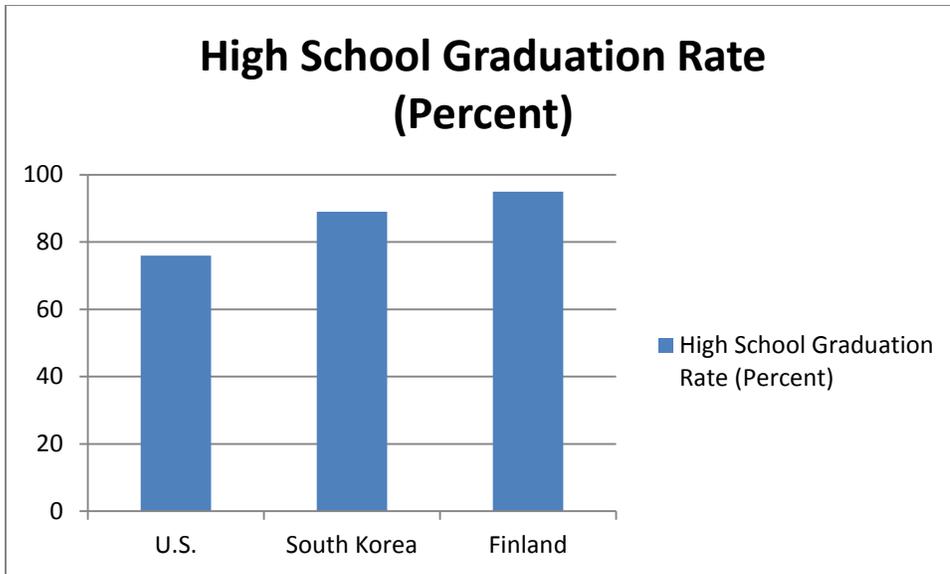
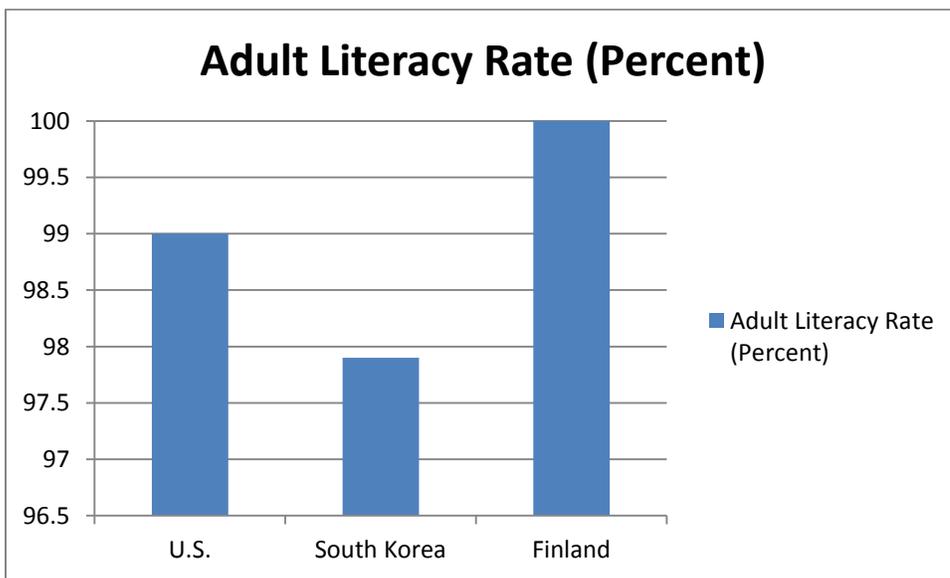


Figure 5: Adult Literacy Rate (Percent)



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