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# STUDENT PERCEPTIONS OF HIGH SCHOOL EDUCATION: A DIFFERENT TAKE ON THE FINNISH VS. AMERICAN SCHOOL SYSTEM DEBATE

## **Abstract**

In 2009, the Programme for International Student Assessment studied academic achievement in 65 countries and ranked Finland third and the United States below average. I analyzed the two countries' catalysts for relative success and failure, focusing on how students perceive education. I conducted my study using an online questionnaire distributed to 420 students (n=420) from Finland and America and ethnographic fieldwork that I completed in Helsinki and Rovaniemi in August of 2011. I ultimately concluded that while Finnish and American students perceived classroom activity similarly in my study ( $p > .2$ ), American students showed a significantly more achievement-based conception of (and desire for) success than their Finnish counterparts ( $p < .001$ ). Likewise, American students compete with their classmates to a greater degree than Finns do ( $p < .001$ ). While this extrinsically-motivated view of education leads to unique advancements and innovation within the United States, it helps to widen the achievement gap. Those who fail to achieve in America become subject to low self-esteem and further failure. In Finland, students are mainly intrinsically or learning oriented, so norm-based failure does not induce low self-esteem or set students back. At the same time, the Finnish educational system is not designed to encourage accelerated learning and achievement among brighter students. Based on these findings, this paper outlines potential solutions to address the challenges presented by the generally extrinsically motivated/achievement oriented student body within the American system, while also pointing out what elements we must retain if we are to improve in years to come. It also highlights the benefits of psycho-sociological research in an educational realm, as examining the type of students within a system can aid in more effective policy-making.

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## **Student Perceptions of High School Education: A Different Take on the Finnish vs. American School System Debate**

**Sammi Cannold**

**I**n September 2011, President Barack Obama addressed the nation about the American school system, proclaiming, “Now is the time to once again make our education system the envy of the world” (Bruce, 2011). Today, American schooling is still far from that goal. Although the United States has doubled expenditure per student since 1971, test scores have remained static, while other countries have continued to improve, including many with declining education spending (Weber, 2010; Sahlberg, 2006). The No Child Left Behind Act of 2001 sought 100 percent proficiency in math and reading by 2014. However, the United States still faces enormous educational obstacles; forty percent of American twelfth graders still have not mastered the math they learned in eighth grade and 7,000 children drop out of school each weekday (Cochran, 2008). As a result, scholars have turned their attention to the countries that have succeeded in recent years: South Korea, China, Japan, and most notably, Finland.<sup>1</sup>

The literature comparing the American system to the Finnish one has been mostly structure-based, emphasizing systemic elements, such as hours spent in school per day or teacher qualifications, and how each leads to success or failure. These structural differences can, and do, have an impact on success. For example, since Finns go to college for free and Americans do not, it is logical that Finland has a lower dropout rate as students progress towards college. However, when searching for solutions, it is essential to look carefully at the cultural context for education within the studied systems. In doing so, we gain a better sense of why certain structures were created in Finland, how specific elements there incentivize or discourage success, and most importantly, which of these features might improve the U.S. education system, while simultaneously maintaining the core values embedded in our current system. This paper will delve into the comparative viewpoints of students in the Finnish and American school systems specifically and examine how their respective outlooks on education contribute to successes or failures.

The paper will also conduct this examination from a unique stand-

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point. Youniss and Smollar, in *Adolescent relations with mothers, fathers, and friends* (1985), demonstrated that young people are more willing to divulge information and sentiments on a given topic to their peers and are similarly more equipped to understand one another. With this in mind, I explored the Finnish and American school systems as an ‘insider’—studying their respective structures and the pupils within each as a fellow student and an adolescent.

### **Programme for International Student Assessment**

Every three years, the Programme for International Student Assessment (PISA) tests 15-year-old students in 65 countries for proficiency in math, science, and reading. The test focuses on the students’ “ability to use their knowledge and skills to meet real-life challenges,” as opposed to their mastery of factual information. With each exam, test-makers choose a major focus area. For example, in the 2009 study, reading was emphasized, while math and science were relegated to minor domains (OECD, 2009). An additional component of the examination is a questionnaire given to students and their parents to assess the impact of home life on education in the respective countries (Chapter 1, 2011). Approximately 470,000 students participated in the study worldwide in 2009, requiring them to sit for a two-hour paper test, in addition to completing a thirty-minute survey about their learning style and school.

### **America’s Failure, Finland’s Success**

America’s GDP is the highest in the world, at \$14,582,400 million USD (World Bank, 2011). Yet, in the most recent PISA Study, in 2009, the United States ranked between 24th and 36th (13 countries had roughly the same mean) for student achievement in reading, mathematics, and science. While the Finnish GDP ranks 34th at \$238,801 million, Finland’s education system places third, just below China (Shanghai specifically) and South Korea (World Bank, 2011). Additionally, the graduation rate in Finnish Upper Secondary Schools (the equivalent of high school) is ninety-six percent, whereas in American schools it is 75 percent (Gammerman, 2008). The phenomenon behind the success has perplexed researchers since Finland first placed in the top five in 2000 and Americans and Finns alike have flocked to Finnish schools to learn why the system is so successful (OECD, 2004; Välijärvi, 2002).

### **Reasons Behind Success**

#### *Grass-Roots Foundation*

Prior to 1950, Finland was an agrarian society. However, the industrial revolution changed the social structure by increasing the manufac-

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turing base, thereby calling for a larger working class. Education became a grass-roots movement, with parents fighting for equality in opportunities for their children, as they realized that the only way to compete in the new economic climate would be through education (Kupiainen et. al., 2009). The result was a system in which children go to school for free and receive complementary hot lunches. Post-secondary attendance is also free of charge.

### *Equality within the School System*

Equality extends beyond finances in Finland. Whereas the American system contains Honors and Advanced Placement courses, policymakers in Finland deemphasize tracking, class rank, and stratification. Admittedly, some American schools are eliminating these measures, but they are still prevalent in our system and non-existent in Finland's. In the classroom itself, Finnish educators also place more attention on weaker students as opposed to pushing already gifted ones to excel further and challenge themselves (Kupiainen et. al., 2009). While the immediate assumption might be that students will be bored within the classroom, those who have already mastered the material are allowed to focus on other things or interact with other pupils without punishment. The rationale is "that bright students can help average ones without harming their own progress" (Kupiainen et. al., 2009). Interestingly, talking while the teacher is speaking is not a rarity in the Finnish classroom. One half of Finnish students claim their teachers are unable to quiet them down quickly and Finland ranked third from last in a 65-nation classroom discipline study (YLE, 2011). But as Headmaster Päivi Ristolainen at the Strömberg School in Helsinki told The Finnish Broadcasting Company, "Not every pupil is doing the same thing at the same time. It is not a matter of teachers letting them do whatever they want, but rather of approaching goals along many different paths." Therefore, the classroom becomes something of a democratic environment, in which students are encouraged to interact with each other during lessons and learn at their own pace.

In keeping with the idea of structural equality, only two percent of Finnish students have been held back a grade by the time they are sixteen (YLE, 2011). Conversely, in the United States, seventeen percent of high school seniors have repeated a grade (Editorial Projects in Education Research Center, 2004). Additionally, in Finland, collective cultural values, including cooperation and equality, also often result in group work and emphasis on collaboration within the classroom (Maltay, 2007). Educators in Finland largely believe that group work should be emphasized, because it allows students to develop their metacognitive abilities, which are very similar to those needed for 'real life' problem solving (Berry & Sahlberg, 2006).

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*Consistency in Demography*

Only four percent of Finnish residents are considered immigrants, compared to 12.9 percent in the United States (Center for American Progress, 2012). Additionally, the 2000 Finnish Core Curriculum outlined the importance of continued support of immigrants' cultures of origin, emphasizing "the opportunity to grow into two cultures" (Finnish National Board of Education, 2010). Immigrants in the United States, however, do not seem to be adequately accounted for in the educational system; specifically, fifty percent of Latino students fail to graduate from high school. Even though Finland is mostly homogenous, they have mastered the challenges presented by a diverse population in the regions where it is relevant. While some urban school districts have an immigrant population of almost fifty percent, Finland maintains its stellar academic record (Immigrant Education, 2009).

*Student Independence*

In Finland, teachers, parents, and policymakers give students a great deal of independence with which to approach their own schooling (Immigrant Education, 2009). Despite their success, the average amount of nightly homework in Finland at the Upper Secondary level is half an hour. Conversely, in American high schools, students can expect upwards from 2 hours per night (Wallis, 2006). While homework is not optional in Finland, students are not penalized if they choose not to do it, and "students are expected to take an active role in designing their own learning activities" (Matilainen, 2011). Although guidance counselors are present, Finnish students are given the opportunity to redesign their courses every two months, and only about half of their classes are actually compulsory, leaving room for other areas of study. As exchange student Saga Luoma (currently studying in Arizona) told me in a Skype interview, "In Finland, it's your responsibility to do the work. If you don't do it, it's your fault. But, in the United States it's more that they make sure you do it."

*Teachers and Respect*

Perhaps, one of the most praised aspects of the Finnish system is its teachers. "Since only 10 to 15 percent of teaching candidates gain admission to teacher education programmes, rigorous screening to select the most adept and motivated students can be applied" (Matilainen, 2011). Finns have a great deal of respect for the teaching profession even though teachers are called by their first names and considered peers within the classroom (Talih & Hosoya, 2008). In later analysis, I will balance the emphasis given to this aspect of the system as scholars have already credited it as a main cause of success and one of the primary ways to improve the teaching base is to improve the school systems they come from.

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### *Autonomy*

Researchers hypothesize that Finnish teachers are as effective as they are in part because of the large degree of autonomy given to them. Although there is a loose national outline, teachers can choose their own textbooks and methods and they are very involved in designing the local curriculum. Teachers create most exams, as there is no national assessment until the final year of schooling. This system also minimizes accountability measures for teachers. While there are matriculation exams for students at the end of their Upper Secondary careers, they have no bearing on teacher pay, bonuses, or status in school. Unlike with the recent No Child Left Behind Program in America, no Finnish school will receive budget cuts due to a failing grade.

In contrast with American institutions, governed by programs like No Child Left Behind and Race to the Top, schools in Finland have gained considerable amounts of freedom in recent years as the system has become more decentralized. In Finland, children begin actual schooling at age seven and pre-school care is provided free of charge even though a large percentage of children do not attend. After Lower Secondary school, students have the choice of going onto Vocational or Upper Secondary Schooling (Lukio) followed by University or Polytechnical school (Talih & Hosoya, 2008).

### *Vocational Schooling*

Pre-University vocational schooling became popular in Finland in the 1980s and today these institutions are attended by roughly 47 percent of Finnish students at the high school level. American policymakers remain largely unreceptive to this idea. The dropout rate in Finnish Vocational schools is just ten percent, whereas over a quarter of American students do not graduate from high school, leading these institutions to serve as potential avenues for reform (Talih & Hosoya, 2008).

### **Objectives and Rationale**

The literature reviewed thus far has focused largely on the components of the system that have contributed to Finnish success. My study delves into how the students in the system, and their perceptions, have a different impact on success. Specifically, I hoped to gain a comparative understanding of student perceptions of teaching/classroom interaction in Finland and in the United States and of comparative desire for success in both groups of students. With this information, I hoped to develop potential solutions for the American system based on Finnish success and determine if the Finns have potential for improvement and what aspects of the American system should be retained.

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## Methods

My study, which had two main components, consisted of an on-line questionnaire and ethnographic fieldwork that I conducted, mostly in Helsinki, in August of 2011.

### *The Online Study*

**Site content.** I created two online interfaces using the Google Sites software, one in English and one in Finnish. The purpose of each site was to survey American and Finnish students respectively and compile the data from their responses. Each site consisted of four pages as follows:

**Page one: Introduction.** This page asked students to participate in the study and explained the parameters.

**Page two: Frequently asked questions.** This section detailed answers to questions such as “What will I get out of participating?” and “What are the risks of participating?”

**Page three: Background questions.** See Figure 1 below.

<p><b>1. Where are you from? *</b></p> <p><input type="radio"/> a. Finland</p> <p><input type="radio"/> b. United States</p> <p><input type="radio"/> Other: <input type="text"/></p>	<p><b>4. What is the language that your primarily speak at home? *</b></p> <p><input type="radio"/> a. Finnish</p> <p><input type="radio"/> b. English</p> <p><input type="radio"/> Other: <input type="text"/></p>
<p><b>2. What is your gender? *</b></p> <p><input type="radio"/> a. Male</p> <p><input type="radio"/> b. Female</p>	<p><b>5. How would you rate yourself as a mathematics student? *</b></p> <p><input type="radio"/> a. One of the top students in my school</p> <p><input type="radio"/> b. Above average</p> <p><input type="radio"/> c. Average</p> <p><input type="radio"/> d. Below average</p> <p><input type="radio"/> e. One of the bottom students in my school</p>
<p><b>3. How old are you (in years)? *</b></p> <p><input type="radio"/> a. 14</p> <p><input type="radio"/> b. 15</p> <p><input type="radio"/> c. 16</p> <p><input type="radio"/> d. 17</p> <p><input type="radio"/> e. 18</p> <p><input type="radio"/> Other: <input type="text"/></p>	<p><b>What degree of success do you want to attain in life? *</b></p> <p><input type="radio"/> a. I would like to be more successful than the majority of my classmates</p> <p><input type="radio"/> b. I am fine attaining the same level of success as most of my classmates</p> <p><input type="radio"/> c. I do not wish to be as successful as the rest of my classmates</p>

**Figure 1:** *Students were asked background questions to gather both demographic and evaluative information*

**Page four: Video response.** Finnish and American students were asked to watch a two-minute video clip of classroom interaction (US3 Exponents, 2010). The video showed an American teacher giving a mathematics lesson on exponents in English to a class of seventh graders. The clip was taken from the TIMSS video studies archive and was originally filmed in an authentic classroom as a part of an observational study in 1999. Though the TIMSS archive contains many videos of classroom activity, I felt this was the most appropriate for the study since 1) It covers a subject matter that seems to be fundamental in all mathematics curricula, 2) There are many different things going on in the video for students to potentially comment on; the teacher is doing a demo, the students are interacting with one another, the teacher is calling on the students, etc., 3) The lesson seems fairly self-contained; by the end of the segment, the takeaways and important material are fairly evident to the viewer and 4) The lesson is in English (as opposed to videos of Japanese or French teaching) so comprehension is easier for both Americans and Finns (most Finns are entirely fluent in English and subtitles were included for those who are not).

In the clip, the teacher begins by explaining what exponents are, then shifts to reviewing what they learned previously in fifth and sixth grade and then goes on to explain the concepts and terms. Using blocks, she demonstrates the nature of exponents in how they grow. She then asks the students to predict what the next numbers would be before displaying them with the blocks. The participants were asked a series of questions, seen in Figure 2. The idea was that their answers would give an accurate depiction of learning styles, preferences, and perceptions of Finnish and American students as influenced by their respective cultures.

**Anonymity.** Students' names were neither collected nor given on the online site. All identifiers were only viewed by myself and were only representative of a certain demographic (e.g. a fifteen year old boy from Finland who believes he is one of the best students at his school).

**Site variance.** Two sites were created, one in English and one in Finnish, in an effort to better accommodate students preferring to view videos in Finnish. For the Finnish site, I contacted Professor Jaana Juononen at the UCLA Department of Psychology, who graciously translated the questions. The items were then uploaded to the second site. While the audio was still in English, Finnish students could view the clip with subtitles. I downloaded the transcript of dialogue in the videos from YouTube, translated it, re-attached it to the video using iShowU (ShineyWhiteBox Inc., Wellington, NZ), and uploaded the subtitles to the Finnish site.

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**1. Based on just this clip, how would you rate the effectiveness of the teaching? \***

- a. Very ineffective – it would be hard to learn in this classroom.
- b. Somewhat ineffective – It would be somewhat hard to learn in this classroom.
- c. Neither effective nor ineffective – It would be neither hard nor easy to learn in this classroom.
- d. Somewhat effective – It would be somewhat easy to learn in this classroom.
- e. Very effective – It would be very easy to learn in this classroom.

**2. Explain your rating \***

**3. Briefly describe something about the instruction that could be changed that would make it more effective. \***

**4. What did you think of the pace of the instruction? \***

- a. Way too slow
- b. Somewhat too slow
- c. About right- a good pace
- d. Somewhat too fast
- e. Way too fast

**5. How similar is this to something you might see in your own classroom? \***

- a. Very similar- I would expect to see this frequently
- b. Somewhat similar
- c. Somewhat different
- d. Very different - I would never expect to see this

**Figure 2:** *Questions asked of students after viewing a clip of classroom activity*

### *Outreach*

Since the subject sample was composed of American and Finnish teens ages thirteen to nineteen, I decided that the most effective way to reach them online would be through social-networking websites as these interfaces are often frequented by the above demographic.

An advertisement was placed on Facebook, aimed at site users ages fourteen to eighteen listed as English or Finnish speakers. Second, I used Interpals.net (an international pen-pal site) and modified search terms to get in touch with students in America and Finland. Third, I contacted schools within Finland, found through the Finnish National Board of Education Website, and asked them to distribute links to their students. Additional methods of outreach were also used, such as email loops (i.e. all the contacts for the Byram Hills High School Debate Team) Facebook “statuses.” A voluntary response model was used.

### *Data Collection*

Google Sites has a feature in which all data in a “form” (online questionnaire) gets downloaded directly to a Google “Doc” or Spreadsheet. The data was coded based on the date and time of entry.

### *Data Analysis*

I coded responses from page three of each site and placed them into separate documents, stripped of identifiers. Twenty students (aged fifteen to eighteen), recruited from the Byram Hills High School Authentic Science Research Program, remained after school to assist in coding the data. Each was given several sheets and asked to choose “yes” or “no” for each of the criteria below based on the responses. The design was meant to avoid the biases introduced by a researcher coding her own data responses.

**Coding 1.** This response includes commentary on the structure of the classroom. This could be how many students are in the classroom or how it is laid out. Responses that only discuss the technological aids used to complete the lesson do not count.

**Coding 2.** This response includes an evaluation of how the students in the video are reacting. In other words, the responder used the actions and reactions of others to create their evaluation.

**Coding 3.** The students use the words ‘bored’, ‘boring’, or ‘bore’ (or some variation) in their response to describe the lesson, their reaction to the lesson, or the students’ in the videos reactions to the lesson. Words or phrases synonymous with bored count as yeses (i.e. minds wandering).

I gave students examples of codings that would warrant a “yes” or a “no” for each category to assist in the coding. Two students viewed and coded each response sheet, and results were later collected and evaluated for significance in student perception based on country of origin. In the event of two different answers from the two students who viewed each response, it was given to a third student for evaluation. The coders (students recruited) did not know which country the responses were from when they coded them, as all Finnish responses were translated to English using Google Translate.

### *Statistical Analysis*

After collecting all data, I used scales to numerically code the sets of qualitative data. These allowed for the responses to be coded quantitatively by assigning a number to each response. I then ran two-tailed, two-sample, t-tests on each set.

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*The Observational Study*

In August 2011, I personally observed students, teachers and administrators at the Kulosaari Upper Secondary School in a suburb of Helsinki. Each day, I attended four class periods and did additional observational work outside of the classroom (including lunch periods and student interaction between classes). I spent the first day with a first year (the equivalent of 10th grade) student as my guide; the second, with a second year, and so on. The classes ranged from Psychology to English and the teachers were given prior knowledge of the observations.

Although I did not run explicit experiments in the classroom, the observations conducted revealed significant elements and details of the system. I took notes on a variety of categories: first, I noted lessons were noted for parallels to American classes. I based this on my personal experiences in an American high school and several videos (from the Trends in International Mathematics and Science Video Database) that I watched prior to arriving in Finland of classroom activity in various American cities.

Second, I observed student behavior during the lesson and noted practices and behavior, ranging from attentiveness, to teaching style, to the types of notes they took when the teacher was speaking. Additionally, in several situations in which group work was included, intra-student interaction was observed for its efficacy or lack thereof.

Third, I placed emphasis on observation of teacher-student interactions. This included how students addressed the teachers, how formal the relations were, and how the teachers asked questions of the students.

I obtained additional material from 43 one-on-one interviews with students, teachers, and administrators (as well as several Finnish individuals outside of the school setting). I asked them a variety of questions, ranging from their thoughts on the effectiveness of the system to what they like/dislike about schooling in Finland. Most interviews were recorded on video with prior permission and are being cut into a documentary short.

Subsequently, I spoke to three exchange students (Finns staying in American) via Skype to get the unique perspective of a student who has experienced both systems (TIMS, 2010). I watched prior to arriving in Finland of classroom activity in various American cities.

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*Students at the Kulosaari Upper Secondary School in Helsinki share their views on the system*

## **Results and Discussion**

Four hundred and twenty ( $n = 420$ ) American and Finnish students took part in the study in some capacity. Two hundred and ten were American ( $n = 210$ ) and two hundred and ten were Finnish ( $n = 210$ ). “In some capacity” denotes that the study did not require all students to complete all questions. While all subjects filled out the background questions, the samples in terms of the number of students who completed the additional 5 minutes of video response were ninety Finns ( $n=90$ ) and one hundred Americans ( $n=100$ ).

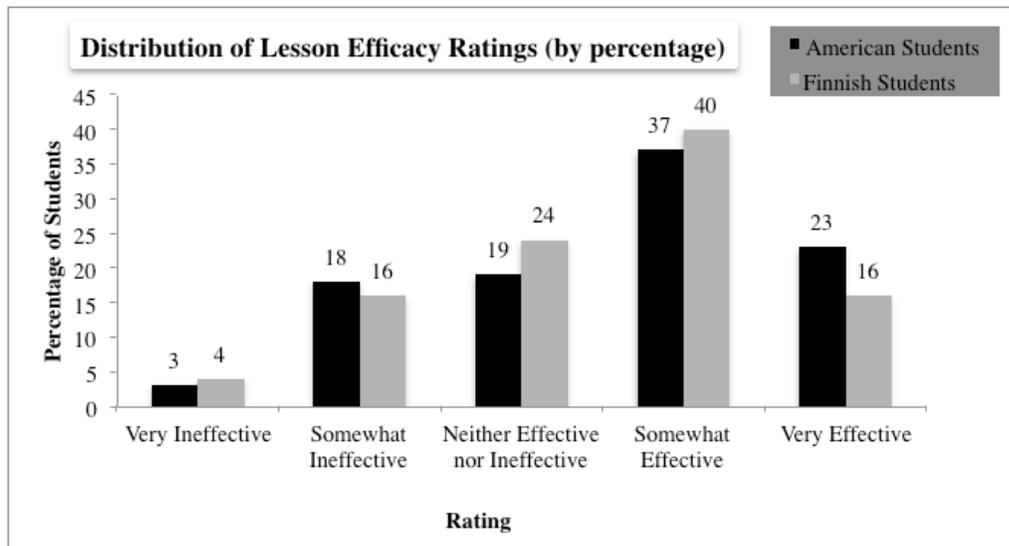
### *Video Response Analysis*

Prior to conducting the study, I isolated six response variables to discover potential differences between Finnish and American students. However, students’ answers indicated no significant discrepancy in any of the six categories (Figure 3).

I initially posited that a difference in effectiveness and pace rating might correlate to Finnish success; since Finns excel more in terms of

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testing, it seemed they would logically have a higher rating of the classroom experience. The more highly students evaluate the lesson, the more likely they would be to find it effective and therefore absorb content. However, answers to Video Response Questions 1 and 2 demonstrated that the majority of both Finns and Americans rated the teaching as somewhat effective and about right—a good pace with no statistical significance between groups ( $p = 0.44$ ,  $p = 0.35$ ). Figure 3 illustrates the percentage of students in each domain; the distributions for both pace and similarity were similar to the one pictured. cant ( $p = 0.81$ ).



**Figure 3:** American and Finnish ratings of efficacy had similar distributions ( $p = 0.44$ ). The same was true for ratings of pace ( $p = .35$ ), lesson similarity ( $p = .29$ ), the inclusion of comments about classroom structure ( $p = .42$ ), the inclusion of student evaluation ( $p = .81$ ), and indications of boredom ( $p = .81$ ).

Americans and Finns reported that the teaching in the video was somewhat similar to what might be seen in their own classrooms although it solely displayed American teaching ( $p = 0.29$ ), thus demonstrating their theoretical lack of bias as determined by their country of origin and/or the type of lessons they are used to.

Twenty four percent of Finnish students and twenty nine percent of American students included a comment about the structure of the classroom ( $p = 0.42$ ). The idea was to see if one group might be more concerned with non-academic distractions (e.g., class size or arrangement of desks); the results demonstrated no general difference.

Additionally, I wanted to see if both student groups referred to the students in the video more frequently when forming their own evaluations of teaching. In other words, whether or not they looked to others to form

their own opinions. Contrary to expectations, 22 percent of Finnish students and 21 percent of American students used the reactions of the students in the video to form their own evaluations of the interactions and the difference was not significant ( $p = 0.81$ ).

*Based on these criteria, we can suggest that American and Finnish students tend to perceive teaching in the same manner and its effectiveness generally at the same level. Thus, unless later studies show a relevant difference, there may be no inherent difference in how American students evaluate teaching and classroom interaction. Therefore, reasons for our comparatively lower PISA rating must come from elsewhere. The following section will propose that source.*

#### *Analysis of Desire for Success*

While 86 percent of American students said they wanted to achieve higher levels of success than the majority of their peers, only 44 percent of Finns had the same answer. Instead, fifty percent of Finns said they would be fine attaining the same level of success as the majority of their classmates, and six percent said they would even be content with less. Conversely, fourteenpercent of American students said they would be fine with the same level of success as the majority of their classmates, with none saying they would be content with less ( $p < 0.000$ ) (Table 1/Figure 4).

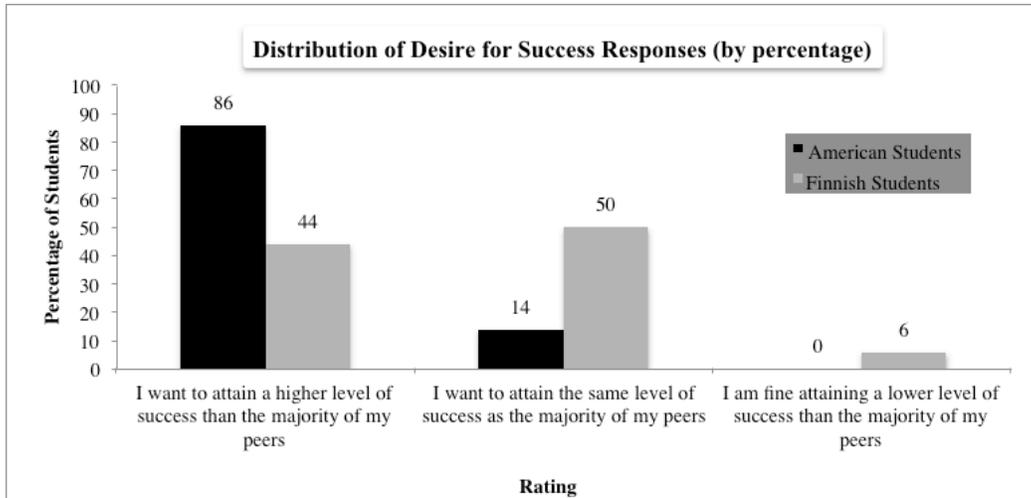
While Finnish and American students respond similarly to classroom interaction and evaluate it mostly in the same manner, their overall desires for success may have more of a direct positive impact on the success

Question	Sample Size	Mode American Answer (%)	Mode Finnish Answer (%)	Significance
Success Level	64 Americans 70 Finns	I'd like to be more successful than the majority of my classmates (86%)	I am fine attaining the same level of success as most of my classmates (50%)	$p < 0.000^*$

Alpha = 0.05

**Table 1: Desire for Success**

*American students generally want to be more successful than the majority of their peers while Finnish students are fine attaining the same level of success as the rest of their peers.*



**Figure 4:** American students generally want to attain a higher level of success than the majority of their peers, while Finnish students are more content being on par ( $p < 0.000$ ).

of the Finnish system. It seems counterintuitive to say that the Finns are more successful because they desire less success, but the clarification comes in what it means to be successful in each culture.

Scholars contextualize Finnish success in terms of motivation towards the central strata. The system prides itself on emphasizing personal and academic development rather than competition and comparison (Voogt & Kasurinen, 2003).

Since college education is free in Finland and standardized testing not an issue until the very end of high school, it appears that students there have little motivation to learn what is derived from testing or norm-based success. “The students are motivating themselves here,” said Finnish University student Mariana Hilker in an interview in Helsinki, “You’re more motivated to learn, instead of feeling like you have to.” Conversely, the American system is more of a “success-oriented society whose attitudes toward achievement can be traced to our [country’s] Protestant heritage with its emphasis on individualism and the work ethic.”

“In the United States, people are usually much more competitive in everything,” said Finnish exchange student Mona Kauhanen in a Skype interview, “In Finland, it’s much more individual. You take care of your studying and he or she takes care of their own.”

Education in America is premised on norm-based achievement, and so, students often want to get ahead and attain a high level of success. One potential problem then, for the United States, is that while 86 percent of students want to be more successful than the majority of their peers, it is statistically impossible for this to occur; theoretically, at least 42 percent (roughly) of these students (and 36 percent of all students) will fail to attain

that goal. Therefore, it is essential to first examine whether this perception of success is a detriment for American education and society.

Based on my direct observations of Finnish and American students and their responses regarding their respective desired success levels, I contend that American students largely constitute extrinsically motivated/achievement-oriented students whereas Finns are largely intrinsically motivated/learning-oriented. The problem for extrinsically motivated students is that failure to achieve goals is seen as a detriment to success. Achievement-orientation leaves little room for less than perfect performance, and so, many end up in a position where, they fail to achieve the goals they set out to, and view themselves as failing.

These differing student motivational tendencies have two main implications. First, students in both cultures create for themselves a self-fulfilling prophecy in which they expect a certain level of achievement and so perform accordingly. Second, students act according to their motivational profile in their relations with teachers and an expectation for success or lack thereof is created (Tapola & Niemivirta, 2008). Applying this categorization to the example at hand, the argument would then be that American students fall into certain profiles by either attaining success or failing to do so. Finns, on the other hand, avoid such pitfalls by eliminating failure; if the goal is simply to learn, the only setback would be not achieving personal goals in that regard.

This can be a double-edged-sword; Finns are not encouraged to go past the baseline of average performance, while those already above it in American schools are pushed to achieve further. Furthermore, the fact that the majority of American students want to get ahead of their peers while Finns are content staying in the middle illustrates the dichotomy between the two orientation domains the students inhabit. In another conversation with exchange student Mona Kauhanen, she told me that “people in Finland want to be the same level. It’s fine to be middle class. You don’t need to do any better to be happy with your life.” She explained that because “social security is different [in Finland]...even if you do not [do that well] you can still have a good basis for a living. You don’t necessarily need to work that much since you can still have a nice quality of life.” Therefore, it makes sense for Finns to be more motivated towards the middle as they are guaranteed a baseline level of living.

These profiles may outline an additional reason for the discrepancy between American and Finnish performance. Furthermore, they can assist us in beginning to solve America’s education problems, which are poorly defined in the first place. Programs like No Child Left Behind and Race to the Top seem to be striving for increases in test scores, but in adopting that norm-based focus, policymakers ignore culturally-based problems. American notions of, and desires for, success are what motivate

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(or fail to motivate) students to achieve. Policymakers can alter structural components in countless ways, but our “problems” will not be solved until we look at the crux of American attitudes toward education and learning.

### *The Follow-Up Study*

After completing the initial study, I realized that I could further substantiate my conclusions about Finnish and American students’ respective intrinsic/learning and extrinsic/achievement orientations by providing additional questions about overall educational goals. By referring to Tapola and Niemivirta’s (2008) description of the domains and Carol Dweck’s work on the same material, I developed four questions (Figure 5) that might confirm the different categorizations.

Please rank to what degree you agree with this statement— "My most important goal in school is to acquire new knowledge" \*

1 2 3 4 5

I disagree completely     I agree completely

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Please rank to what degree you agree with this statement— "I am particularly satisfied when I do better in school than others" \*

1 2 3 4 5

I disagree completely     I agree completely

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Please rank to what degree you agree with this statement— "I compete with my classmates in school" \*

1 2 3 4 5

I disagree completely     I agree completely

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Which of the following is most important to you? \*

Attaining more success than the majority of your peers

Learning because you enjoy it

Learning skills to prepare you for success in the marketplace

**Figure 5:** *Follow-up questions*

The answers to the first question demonstrated that there is no significant difference between American and Finnish students in terms of the degree to which they agree with the statement “my most important goal in school is to acquire new knowledge” ( $p = .633$ ). However, there is a significant difference between American and Finnish students in terms of the degree to which they agree with the statement “I am particularly satisfied when I do better in school than others” ( $p < .001$ ) (Table 2A). Similarly, there is a significant difference between American and Finnish students in terms of the degree to which they agree with the statement “I compete with my classmates in school” ( $p < .001$ ) (Table 2B). Finally, more Finns than Americans agreed with the sentiment that “learning, because [they] enjoy it,” is their main goal in schooling and more Americans than Finns agreed with the sentiment that their main goal in schooling is to “attain more success than the majority of [their] peers” (Table 2C).

**Table 2A: Question 2**

<b>Rank</b>	<b>American Students</b>	<b>Finnish Students</b>
1	1.09%	2.17%
2	3.26%	7.60%
3	10.87%	29.35%
4	34.78%	34.78%
5	50%	26.09%
Average	4.293478261	3.736263736

P Value: 0.000121803

**Table 2B: Question 3**

<b>Rank</b>	<b>American Students</b>	<b>Finnish Students</b>
1	5.43%	19.57%
2	11.96%	28.26%
3	20.65%	19.57%
4	27.17%	21.74%
5	34.78%	10.87%
Average	3.72826087	2.760869565

P Value: 4.3382E-07

**Table 2B: Question 4**

<b>Rank</b>	<b>American Students</b>	<b>Finnish Students</b>
A	15.22%	7.61%
B	30.43%	45.65%
C	54.35%	50%

The most meaningful pieces of information that can be drawn from this data are first, that Finns are less satisfied than Americans when they perform at a higher level compared to their peers and second, that Americans tend to feel they compete with their classmates more so than Finns do. These results make sense within the scope of what's known about the two school systems. That university education is free, that there is a lack of tracking or valedictorians and that competition is generally less emphasized in the Finnish system would seem to contribute to a decreased desire to be better than one's peers. Therefore, these additional results help to substantiate the motivational profiles of American and Finnish students that help to cause the discrepancy in their success levels. The question then is what to do.

### **Potential Solutions**

#### *Career and Technical Schooling*

Based on the desires for success and competition of students in both systems, I first posit that American policymakers and educators should be more receptive to legislation supporting vocational schools. This type of schooling, once popular in the United States, uniquely provides for students who would otherwise fall behind after failing to attain achievement goals. If students have interests outside of the typical academic scope, vocational schools could give them an opportunity to pursue that path instead of becoming failing statistics. By 2020, "123 million American jobs will be in high-skill/high-pay occupations...but only 50 million Americans will be qualified to fill them" (Voogt & Kasurinen, 2003). Vocational school may provide unique solvency for both this issue and that of decreased student motivation to learn certain academic subjects. If students are presented with additional outlets for learning subjects that appeal to them, they are more likely to pursue that education.

Students who choose this track have the opportunity to excel in an area they might not otherwise have access to. As mentioned earlier, this type of education has been wildly successful for Finns, so if Americans adopt a more choice-based model, like Finland, we may be able to account for students who are 'stuck' on undesirable paths in the status quo. The results demonstrate that 86 percent of American students desire more success than the majority of their peers; if we give them new domains in which to attain this, they are more likely to meet their goals and perhaps, all 86 percent can be satisfied, but in their own areas of expertise. In this way, we can 'cheat' the statistical impossibility of competitive success, as the Finns seem to do.

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*Decreased Norm-Based Accountability Measures*

Based on Finland's success with the opposing model, norm-based accountability measures (e.g., punishment, budget cuts and firing for poor performance) should be reduced or eliminated, when possible, to foster support for those falling behind. Failing students obtain their position in the first place because of norm-based standardization. In other words, a number is used to tell them they are failing and they consequently are less incentivized to perform at a high level. Eliminating norm-based accountability measures, such as the ones contained in No Child Left Behind, when possible, reduces these catalysts. Additionally, studies have shown this type of enforcement to be ineffective. Popular practices, like accountability-based standardized testing, simply result in teachers desperately cramming to teach to the test, as consequences exist for poor performance (Young, 2005). Further, evidence shows that "high-stakes accountability oversimplifies how human behavior is conditioned by rewards and punishments... extrinsic sources of motivation such as...grades actually undermine natural curiosity and a student's enjoyment of learning" (Brown, 2006).

Norm-based accountability forces students into the role of extrinsically motivated learner as they are given a goal that they must obtain, thereby also increasing competition levels to such a degree that 62 percent of American students generally agree with the statement "I compete with my classmates" (Table 2B). This consequence puts America in a precarious position as those who fail to attain the goal simply fall behind. This correlates well with the idea that 1) The Finnish system lacks strict accountability-based measures and is simultaneously successful and 2) Finns are ultimately intrinsically motivated and so (at least theoretically) learn for learning's sake. It is important to note that I do not advocate the elimination of all testing; Finns have tests and even a matriculation exam at the end of high school. Rather, I propose that we eliminate consequences associated with poor performance on these exams, just as the Finns do, since forcing educational choices into narrowly defined brackets of success seems to cause nothing but peril. As Finnish teacher-in training Johani Makia said in an interview about the system: "If a pupil has a very bad score on a test, we can give more resources to that pupil. In Finland, testing is for the kids."

*Elimination of Retention*

Even though retention (grade repetition) has been shown to be an ineffective policy, most American schools continue to use it (Brown, 2006). American schools hold back fifteen percent more of their students than Finnish schools (Education Week, 2004; Välijärvi, 2008), but, a recent study shows this [retention] to be an ineffective method as students are forty and fifty percent more likely to dropout if held back one year and ninety percent after two. Based on these comparative statistics and the above analysis

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about motivational profiles, I suggest that American legislators and educators strive to do away with policies allowing for retention except for in the most extreme cases. Grade repetition leads students to believe that they are “flunking’ [and is thus] hard on their self-esteem and how they see themselves.” Additionally, teasing and separation from peers leads to vulnerability and low self-esteem. Doing away with retention thus reduces a catalyst for failure without eroding potential benefits to the system; retention does not appear to have positive impacts in the first place.

### **What We Are Doing Correctly**

While there are elements of the American system that we should abandon or fix for proper reform, there are also facets that perhaps ought to remain the same. Although eliminating certain competitive measures may be desirable, American educators and policymakers should not remove all elements contributing to competition. Even though Finns feel otherwise, competition leads to a unique type of success. Meaning, the American system lends itself to innovation and discovery in its brightest students instead of capping student potential at average as the Finns do. Elements such as the lack of AP Courses and extracurricular activities in the Finnish system seemingly limit the potential for individual achievement. In my conversations with Finnish students, they seemed relatively un-engaged in activities outside the classroom to further their development. The fact that American students want to be more successful than the majority of their peers seems to correlate to the successes of individuals in our society when compared to the Finns. Most likely could not name five famous Finns. While there is no way to quantify the success of individuals directly, the Finns tend to keep their innovation on a local scale. Richard Cousins, International Coordinator at the Kulosaari Upper Secondary School explained that, “Finland doesn’t [put a huge amount of resources into putting itself on the map]...it is just the introverted nature of the normal Finn.”

Additionally, on the Global Creativity Index (GCI), designed by the Martin Prosperity Institute to measure the level of talent, tolerance, and technology in a given country, the United States ranks just before Finland in second place. GCI surveyed these components in 82 countries worldwide and the ratings supposedly correlate to future success and prosperity (Mellander & Stolarick, 2011). Since the American system has programs like tracking, it allows capable students to get ahead in academic areas, theoretically leading to higher levels of success later in life. Finnish teacher-in-training Johani Makia illustrated this concept: “In Finland...young people don’t participate in anything social these days, “ he said, “They don’t participate in associations. They don’t have many extracurricular activities...They know very well, but they don’t *do* anything.” While Finns may be obtaining success in the realm of testing, perhaps they can still improve

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in creating more productive and motivated students outside of the classroom. In America, even though norm-based testing may tell us we are failing, it is essential to remember the areas in which we are succeeding and Finns may not be.

Throughout my time in Finland, I grappled with the question of why Finnish success matters and how it translates into benefits for the country. The answer I got from educators and students was consistent: Finnish policies are focused on achieving domestic success and a high quality of life internally, but international competition is not that important, despite their ranking towards the top of all international testing scales. In other words, the Finnish system, like its students, is intrinsically motivated, instead of extrinsically. If we strive to completely emulate the Finnish system, we will inadvertently eliminate the sentiments of achievement that are so key to our core culture. Therefore, if we want to retain our success on the international stage, we must not imitate every last Finnish aspect.

### **Conclusion**

Although Finnish and American students are alike in their responses to, and evaluations of, teaching and classroom interaction, their differing perceptions of and desires for success produce the gap in rankings. Therefore, based on the different types of learners that the American and Finnish systems respectively generate, American policy-makers should implement more legislation supporting vocational schools, decreased norm-based accountability measures and less use of retention, while still retaining a commitment to sustaining our competitive edge. There are certainly significant lessons to be learned from Finland, but care must be taken to choose which Finnish elements to adapt and which American elements to preserve. At the end of the day, the most important takeaway seems to be that a system that is molded to the cultural ideologies of the people within it thrives and prospers.

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