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# Finnish Education in the 21<sup>st</sup> Century

## Paradoxes and Visions

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Since the publication of the 2000 PISA results (NCES, 2002) highlighting Finland's school children ranking first in the world for reading, and third for mathematics and science, Finland's educational system has piqued the interest of educational researchers worldwide. Of particular interest has been how Finland has maintained these top student performance scores for over a decade with a remarkably narrow range of student performance variability. Researchers have been captivated by the paradoxes of the Finnish education system: teach less, learn more; test less, learn more; and educational equity through growing diversity (Sahlberg, 2015).

As much as the Finnish school system might appear to be “educator heaven,” Finland has its fair share of educational challenges as well. The 2012 and 2015 PISA results (OECD, 2014; OECD, 2018) indicated a downward trend in the data, with Finnish students losing ground in reading, math, and science, and scores hovering around ranking 10th in the world. In March 2017, I travelled with a group of National-Louis University educators and researchers to Finland to observe and speak with early childhood, primary, middle, and secondary school leaders and teachers, as well as representatives from the Finnish Ministry of Education, the teacher and administrator union, and faculty at the premier teacher preparation university in the country. Our Finnish Study Group was the beneficiary of firsthand accounts of the new Finnish vision for education, and the newly revised national curriculum with 21<sup>st</sup> century learning aims and methods. As an American educator, I expected Finns to talk about how their recent revisions of the national education curriculum would likely return their student achievement scores to the top of the PISA list. It was surprising to me that, instead, one of the first comments I heard from several Finnish educators at the Ministry of Education and elsewhere was concern about the emerging gender gap in Finnish student achievement, and their urgency to address the issue. This was only the first of several confounding paradoxes regarding the Finnish Way (Sahlberg, 2015) that were most illuminating regarding one nation's vision for education and its enactment for the people at its focus.

### “Apples to Apples”

It is somewhat difficult to juxtapose the US education system with the Finnish education system, due to some basic differences that make certain contrasts seem like comparing “apples to oranges.” One important difference between the two systems is that Finland has a national curriculum, unlike the US. The US constitution ceded the responsibility for basic K-12 education to the states, therefore there are essentially 50 different educational systems in the US, each with

its own governance, budget, and curriculum (despite the nascent US Common Core Curriculum movement). In order to afford a more “apples to apples” comparison between these two education systems, the state of Minnesota in some ways can provide a more feasible perspective, given that Minnesota’s population (5.519 million in 2016) is close to that of Finland’s (5.495 million in 2016). Although Finland is larger than Minnesota (130,666 square miles versus 86,943 square miles), the similarities in geography and climate, along with population, create an appropriately scaled basis for comparison in certain educational regards. Minnesota ranks as the third-best educational system in the US, but this must be considered in context. In the 2015 PISA results (OECD, 2018), the US ranked 38 out of 71 OECD countries in mathematics (below the OECD average for mathematics), and 24 out of 71 in science and reading (on par with the OECD average for reading). Finland ranked 11 out of 71 countries for mathematics, 5th in science and 4th in reading—all well above the OECD average for academic achievement of 15-year-old students.

Since K-12 education serves children first and foremost, certain statistics are relevant to a child’s readiness to learn, such as speaking the native language, and the socioeconomic status of the child’s parents (see Figure 1). For Minnesota, the percentage of the non-English speaking population is 11.5%, which is comparable to Finland, where 10% of the population does not speak any of the three mother tongues: Finnish, Swedish, or Sami. One common perception is that the Finnish population is more homogenous than the American population; this is only accurate when comparing Finland to the US on the whole, where 20.3% of the population is non-English speaking.

However, these school systems differ significantly in the number of children living in poverty, with Finland having 5.3% of the population living in poverty (Statistics Finland, n.d.), and Minnesota having 14.3% of the population living in poverty (Minnesota State Demographic Center, n.d.). Overall in the US, 33% of children live in poverty. From an educational standpoint, not speaking the native language and living in poverty can have a significant impact on a child’s readiness to learn in school. Other factors that have a significant impact on a child’s brain development (and therefore, readiness to learn) are nutrition and healthcare (lack of both may be seen as related to poverty). Although the US has twice the number of non-native language speakers as Finland, America has more than 6 times the number of children living in poverty, and only recently initiated national health insurance (the Affordable Care Act of 2010). Both could be considered greater competitive disadvantages than the number of non-native language speakers when comparing the readiness to learn of Finnish and US students. In light of the American proclivity to view the competition paradigm as paramount in our national identity, high poverty rates and lack of access to good healthcare appear to be a massive lapse in Team USA’s educational game plan.

|                                     | <i>Finland</i>   | <i>Minnesota / US</i>  |
|-------------------------------------|--|--|
| <i>Population</i>                   | <i>5.495 million (2016)</i>  | <i>MN: 5.519 million (2016)<br/>US: 323.1 million (2016)</i>   |
| <i>GDP</i>                          | <i>234.5 billion USD (est. 2017)</i>   | <i>MN GDP: 335,147 million USD<br/>(1.82% of US GDP)<br/>US GDP: 19.47 trillion USD (est. 2017)</i>  |
| <i>Children living in poverty</i>   | <i>5.3% of population</i>  | <i>14.3 % MN (2016)<br/>33% US</i>   |
| <i>Non-native language speakers</i> | <i>Finland: Non-Finnish / Non-Swedish / Non-Sami speaking 10% of population (Statistics Finland, 2014)</i> | <i>MN: Non-English speaking 11.5% of population<br/>US: Non-English speaking 20.3% of population</i> |

*Figure 1.* Comparison of population, GDP, children living in poverty, and non-native language speakers in Finland and Minnesota/US (Minnesota State Demographic Center, n.d., Statistics Finland, n.d., United States Census Bureau, n.d.).

### **Educational Equity With Growing Diversity**

In terms of truly leaving no child behind, Finland has done an admirable job of maintaining not only quality of education, but equity of educational achievement, even in light of increasing cultural and linguistic diversity in the country. According to the OECD (2013), the average between-school variance in Finnish student performance in reading was 6% on the PISA reading scale, in comparison to the US between-school reading variance of 30%. On average, immigrant children in Finnish schools scored 50 points higher on PISA than other countries (Hautamaki et al., 2013). This variation in student performance is seen as an indicator of educational inequity. For Finland, this degree of equity in educational achievement is a result of their explicit vision for equity in education that began in the early 1970's with their equity-based school reform movement. Klaus, the Finnish early childhood education administrator our NLU group met with last November, elegantly summarized the Finnish vision for equity: "We want the best school for your child to literally be the school that is closest to your home." This also reduces costs for transporting students to schools, since there is no need to travel far to find a quality school for your child.

### **Teach Less, Learn More**

Teachers in America at the primary and middle school levels teach an average of 26.8 hours per week, which is more than teachers in Finland who average 20.6 hours per week, and the OECD countries which average 19.3 hours per week. This means that teachers in Finland get to invest more of their at-school work time in personal professional development, collaborative curriculum planning, and various school improvement initiatives. This allows schools to truly

develop as learning communities, as it provides time and support for authentic engagement in lesson study and other collaborative learning activities.

### **Test Less, Learn More**

The No Child Left Behind Act of 2001, enacted by the US congress, introduced universal mandatory standardized testing for US students at several levels, starting with the third grade. Although this was an effort to increase educational accountability and US student achievement, US student PISA scores declined from 2000 through 2012. At the same time, Finland maintained the highest student achievement levels in the world while only having one standardized test (the Matriculation Assessment) that all students take at the end of high school, before entering vocational school, technical college, or university. Ironically, the only area where a student's score on the Matriculation Assessment begins to become "high stakes" is for students who want to become K-12 teachers, as the colleges of education in Finland typically only have room for 10% of all the students who apply for entrance into the teacher education degree program. In Finland, it is harder to get into teacher college than it is to get into law school or medical school, simply due to the number of students applying to become teachers. Besides the Matriculation Assessment at the end of high school, Finland does administer a national assessment every three to four years, in which 10% of an age cohort is randomly selected for testing. Requiring less frequent standardized testing in the K-12 educational cycle also realizes substantial cost savings for an educational system.

In terms of economic efficiency, Finland is spending significantly less money on education and yet producing considerably higher quality (better learning outcomes) than America.

### **Less Funding, More Learning**

Finland has free universal education for all, including the highest levels of university and professional studies. Naturally, one might expect education in Finland to be a very expensive endeavor. This, however, is another Finnish paradox. In terms of total public spending on education, defined as all spending on education as a percentage of all national spending, a relatively small percentage of the government's total expenses is for education. In 2013, the Finnish government spent 10.5% of its total spending on education. This is lower than the OECD average of 11.3% per country. In 2013, the US spent more than Finland and the OECD average, with total public spending on education at 11.6%. Additionally, public funds support nearly all education in Finland, so one might expect education to encompass a large percentage of the Finnish economic output. Surprisingly, education comprises only 5.7% of the Finnish GDP, which is slightly higher than the OECD average of 5.2%, but lower than the 6.2% of the US GDP. Add to this, however, the US private sector spending on education, and education in America becomes considerably more expensive. In terms of economic efficiency, Finland is spending significantly less money on education and yet producing considerably higher quality (better learning outcomes) than America. This is also evident at the more granular level of educational institutions. How much an educational institution, such as a school district, spends

per student includes several expense areas, including facilities, materials, teachers' salaries, and number of teaching hours. On average, Finland spends about 11,200 USD per student per year, which is more than the average OECD country spends, at about 10,500 USD per student per year. Again, America's average spending per pupil per year is about \$15,700<sup>1</sup> (OECD, 2016, p. 224). In 2013-14, Minnesota spent about \$11,000 per student, which is on par with Finland, and below the average US spending per student. Minnesota ranks 22<sup>nd</sup> highest out of all US states for per pupil spending, and ranks third in the US for student achievement, but still is not achieving at the same levels that Finnish students are.

**“Where there is no vision, the people perish.”**

An educational game plan, or vision for learning, is another area of comparison between education systems. Leadership scholars know that “mission” is not quite the same thing as “vision.” I searched the websites of the Minnesota and US Departments of Education and was unable to find a vision statement. On the US Department of Education website I did find a mission statement that says its mission is “to promote student achievement and preparation for global competitiveness by fostering educational excellence and ensuring equal access” (US Department of Education, n.d., para. 1). On the Minnesota Department of Education website, I found the Commissioner of Education's mission statement, which is to “improve educational achievement by establishing clear standards, measuring performance, assisting educators, and increasing opportunities for lifelong learning” (Minnesota Department of Education, n.d., para.1).

It is reassuring to see key concepts in these mission statements, such as educational excellence, equal access, and lifelong learning. Other key concepts reflected in these mission statements seem out of place in terms of a central focus for a vision for learning, such as global competitiveness and measuring performance. The history of America includes narratives such as “manifest destiny,” “rugged individualism,” and the capitalist promise that “competition” could solve any problem. The history of education in America includes the narrative that we must “measure what matters” in order to “leave no child behind.” Thus far, these concepts have not moved American PISA scores beyond average. One applicable logical corollary is: If we keep engaging in the same behaviors, we can expect the same results. Given the current information- and technology-age trends, the pace of progress is like an accelerating freight train: America needs an updated vision for learning that keeps pace with quickening innovation, and preferably positions our nation as a vision-leader at the front of the train.

**Vision for the Future**

Finland has a K-12 curriculum revision cycle directed by the Ministry of Education and Culture. Besides the state and university education experts that worked on the revision, over 100 classroom teachers were included in the 2015 revision of the national Finnish curriculum. Finland's new vision for student learning has as its central focus lifelong and authentic student “development as a human being and as a citizen.” Integral to this central focus are the transversal competencies for all subject areas, which broaden the central focus to include aptitudes related to

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<sup>1</sup> These figures are accurate for 2013 and adjusted for purchasing power parity.

knowledge, skills, values, attitudes, and will. These transversal competencies reflect a vision for learning based on values that are personal, national, global, and futuristic. They include:

- Cultural competence, including culturally competent interaction and expression
- Taking care of oneself and others, managing daily activities, and safety
- Multiliteracy (not only multiple languages, but also computer language/coding)
- Information and Communication Technologies (ICT) competence
- Competence for the world of work and entrepreneurship
- Participation and influence for building a sustainable future
- Thinking and learning to learn (see Figure 2)

## Rethinking competences

### National Goals for Basic Education and Transversal Competences

- knowledge
- skills
- values
- attitudes
- will



Figure 2. Finland's vision for schooling, 2015.

Our NLU study team observed this vision for learning in all levels of schools, as well as at the largest teacher training school in Finland, the University of Jyväskylä. For example, in one first-grade classroom, the children were writing computer code on iPads. This is now part of their national curriculum: Besides learning at least two languages in elementary school, Finnish first graders now also learn basic computer coding language.

In addition to revising the curriculum, Finnish educators also updated their vision for school culture, the central concept for this being the school as a learning community. Their vision includes several concepts supporting healthy learning community ideals, such as:

- Responsibility for the environment, futures orientation
- Dialogue and varied working approaches
- Participation and democracy
- Issues of local importance

- Safety in daily life, and well-being
- Celebrating diverse cultures, and language awareness (see Figure 3)



Figure 3. Finland's vision for schooling, 2015.

Their conception of learning emphasizes self-regulated, active, and lifelong learning, and includes the importance of ethics and aesthetics to support the growth of the whole child for full development as a person and citizen. This is also reflected in their new curriculum, which now includes a “mudi,” or multidisciplinary learning module, that each school selects for the year; the students participate in the planning of the project.

### Purpose

In comparing the US educational vision/mission statements with the new 2015 Finnish educational plan, the Finnish vision for learning is learner-centered, global, and futuristic. Reflecting on the comparison of these two educational systems, the depth and breadth of the Finnish vision for education seems holistic, well-focused, and inspiring. I began to wonder about the future of US education, and started a dialogue with my colleagues and doctoral students. I created an online poll that consisted of one question: What is the purpose of K-12 education? One doctoral student posted: “The purpose of K-12 education is the indoctrination of young minds with principles useful to the U.S. economic, political, and social structure. What it is, not what it should be.” A colleague posted: “The mission (or purpose) of a PreK-12 Learning Community is to provide quality opportunities, programs, and services each student needs to achieve his or her academic and personal potential. To this end, everyone from board members, district leaders, principals, faculty and staff, parents, community leaders and businesses, in a clarion voice, need to be ‘all in’ when it comes to the best interests of the youth in their community in creatively working as ONE TEAM committed to guiding students toward pathways for success. When the PreK-12 school system thrives, so does the community and its



quality of life!” Fortunately, these words from current practitioners and educational professors describe a vision, mission, and purpose that are the life-blood of education in America: Without educators with such vision, our educational systems in America would likely be as uninspired and sterile as the US educational vision statement. The US has many educators and educational leaders who are just as passionate about student learning and welfare as the educators I spoke with in Finland. According to Sahberg (2015), Finnish educators and politicians went “all in” and worked as “one team”—as my US colleague described—and together created one of the top-performing educational systems in the world. They truly embraced the vision that the future of their country depended on the educational and holistic development of their students into well-rounded adults and citizens. The US Department of Education has much to learn from student-centered and future-focused world educational leaders such as Finland. It appears that passionate American educators at all levels must be the frontline in leading US policy and politicians to a vision for learning that will truly sustain and enrich the future of America and all Americans, so that the best school for every child is the school that is closest to their home. The future starts now, with every child: Together we can make it more vibrant for our nation, and become a world leader in education.

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