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# **An Analysis of the Educational Systems in Finland and the United States: A Case Study**



Honors Thesis

Caroline Ann Goodill

Department: Teacher Education

Advisor: Kathryn Kinnucan-Welsch, Ed.D.

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## **Abstract**

International assessments have drawn attention to discrepancies in student achievement scores between countries. Due to the relatively new introduction of these tests, scholarly research on the subject has developed as the tests have produced more results. A shared goal of a majority of the research regarding international student achievement is to establish quality educational systems. As the United States continuously ranks at or slightly above or below average on the Programme for International Student Assessment (PISA) over the past twelve years, Finland's consistent success has drawn worldwide attention. For this reason, Finland is the educational system benchmark for this undergraduate thesis. The goal of this honors thesis is to identify specific approaches for improving the American educational system in order to provide every student with a quality education. This thesis reviews literature relating to comparative education, numerical data relating to the context (politically, demographically, and economically) and education structure in each country, and the respective educational programs under review in each country. The literature review addresses key components of success, which are further explored through data collection, including interviews, government documents, universities' curricula, and more. An analysis of the components of the two educational systems will lead the researcher to produce a guide identifying where and what to modify in the American programs based on key components of the Finnish programs.



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# CHAPTER I

## INTRODUCTION

### **Background of the Problem**

Among the many areas of life globalism has affected, political, social, and economic realms are most prominent. Politically, not only do individual countries and their respective leaders exchange treaties, ideas, and support, but also large organizations have participated in international politics. Organizations such as international nongovernmental organizations (for example, Oxfam and Doctors Without Borders) and intergovernmental organizations (United Nations, World Bank, and North Atlantic Treaty Organization) have made important contributions to international politics and world aid. Socially, countries have become a mosaic of cultures. Within New York City alone, Little Italy, Chinatown, and Little India represent three of the many cultures celebrated in one place. Political and social globalism bleed into the realm of economic globalism as money and goods are moved among countries. International currency exchange rates fluctuate along with interest rates, central banks, growth or decline of the economies, and national debt.

The increase and spread of political, social, and economic globalism has also touched education. Education, what used to be an institution passing on singular national values and patriotism, has grown to incorporate the traditions, practices, languages, cultures, and philosophies of a globalized society. Much like its political, social, and economic counterparts, education has seen a push towards an international dialogue. The dialogue, never without its benefits and shortcomings, has grown to incorporate the

voices of politicians, scholars, common-folk, and, without a doubt, educators. The chorus of those involved has pushed and pulled education to take part in, to various degrees, reform.

The Programme for International Student Assessment (PISA) is the current international test placed in the limelight across the globe due to the interest in international rankings. Although current and influential, PISA is not the first international test to rank nations based upon mathematics, reading, science scores, and more. According to David H. Kamens at the International Association for the Evaluation of Educational Achievement (IEA), international tests the mid-1950s, “were *not* conducted with the idea of locating ‘best practice’ models that produced high achievement. They were designed with more pragmatic policy considerations” (Kamens, 2013, p. 120). These assessments, in the beginning, sought to identify the success of educational growth of individual countries, not in comparison to other countries. Since the spread of globalized competition, debatably around the time of Sputnik, international tests became a way to title education supremacy. The research in this thesis looks more closely at two countries participating in international tests.

Finland is the educational system benchmark for this undergraduate thesis for a multitude of reasons. Finland’s performance on international student achievement tests has changed from mediocre to excellent over the years. Between 1962 and 2000, Finland’s performance on the IEA First International Mathematics and Science Study was relatively average. Economic and political indicators also remained unexceptional throughout these years; only minor aspects gained attention like the economic success of Nokia and the educational success of Finland’s literacy rates (IEA Reading Literacy

Study 1988-1994). However, Finland attracted the world's attention in 2000 with top scores in mathematics, reading, and science on PISA. Finland excelled on PISA biannually for the next twelve years. In contrast, the United States has been considered an economic and political leader globally for the past century but has not had the same success on international student achievement tests. Large-scale advancements in industry, technology, and innovation contrast with mediocre rankings on PISA between its conception in 2000 and present day. Since 2000, the United States has consistently ranked at or around the Organisation for Economic Co-operation and Development (OECD) average. The contrast in scores and rankings between two strong economies, societies, and governments has gained much attention.

Influential or not, international student achievement tests have created an atmosphere of international education cooperation and competition as countries draw from each other for best practices. Much like politics, the transfer or borrowing of educational practices from one country to another has many complex implications. Kimberly Ochs discusses this idea by stating, "political scientists have made the distinction between 'lesson-drawing' which is driven out of interest rather than out of obligation, and 'coercive transfer' or 'the direct imposition of a program, policy, or institutional arrangement on one political system by another'" (Ochs, 2006, p. 601). While Finland's education is not imposing a new practice upon the American education system, the term 'lesson-drawing' clearly articulates the intention of this thesis: international comparison for learning driven by an interest in differences and improvement.

This undergraduate honors thesis contributes a synthesis of published findings

regarding specific international education practices, articulating the necessity and practicality of transferring these practices internationally. Due to the reasons outlined below, this undergraduate honors thesis compares practices within the United States of America and Finland. The objective of this thesis is to contribute findings to strengthen the education system in the United States. In strengthening the United States' education system based upon best practices in Finland, a higher-quality education for all Americans is consequently produced. Higher-quality education ideally provides students, schools, the American society and economy, and many more the resources to sustain and enhance an innovative and flourishing democracy.

For the purposes of the thesis, two aspects of the education system will be compared: teacher preparation programs and specialized support programs within p – 12 education designed to support students who have special learning needs. The research questions guiding this thesis are: How does teacher education in Finland and the United States compare? How do the structures and processes of implementation for Part-Time Special Education (Finland) and Response to Intervention (United States) compare? How can the United States learn from these Finnish programs in terms of structure, program specifics, and implementation? The identified trends in Finland will lead to a comparison with the United States' education system, identifying if there are similar trends within the U.S. school, district, state, or national levels. The evidence and findings generated by this undergraduate honors thesis aims at strengthening implementation of American equivalents of Finnish education system trends across all of the United States.



## **Definition of Terms**

For the purpose of this study, the following terms will be used:

The Organisation for Economic Co-operation and Development (OECD) is comprised of thirty-four countries, to date, which cooperate to establish economic growth worldwide. Officially founded in 1961, the OECD was a post-World War II product working to exchange, analyze, and create economic policy in a peaceful manner. Original members included only European nations, but the current organization consists of many non-European countries that have high-income economies and high Human Development Index ratings.

PISA is a worldwide test administered to randomized groups of fifteen-year-olds in sixty-five participating OECD and non-OECD countries. After the initial test in 2000, every three years students are ranked in mathematics, science, and reading proficiencies. The goal, in line with the OECD mission, “aims to evaluate education systems worldwide” as stated on the OECD Internet homepage for PISA.

## **Limitations and Assumptions**

Due to the nature of this study, there are multiple limitations and assumptions. This study is an undergraduate honors thesis, not a graduate thesis or dissertation. The nature of an undergraduate thesis limits its magnitude and duration. Plausibly created within these restrictions, this study looks at specific aspects affecting specific systems of education, rather than looking at multiple aspects or education systems as a whole. Consequently, the researcher has created a narrow focus to allow for completion.

Although many countries were ranked in PISA, Finland is the sole country for this

comparative case study due to its dramatic change in rankings between prior international student achievement tests (TIMSS, etc.) and PISA (2000). This study focuses solely on two specific trends within the Finnish education system that developed and progressed with changes in education achievement. The researcher makes the assumption that the trends and programs correlate with the change in results of student achievement on international tests, such as between TIMSS and PISA (2000). There are various other factors, such as economic, political, and societal changes that contribute to changes in student success between the administration of the TIMSS and PISA, but this study is limited to educational systematic changes.

International student achievement tests place their own limitations and assumptions on this study. PISA pulls from a total of thirty-six OECD and non-OECD countries. Compared to the one hundred and ninety-six official countries existing in the world to date, one hundred and sixty countries did not test their academic achievement. Therefore rankings do not reflect the total picture.

The use of PISA and all standardized testing is a controversial topic. The researcher has researched the current debate over international tests. There are critics (Yong Zhao & Heinz-Dieter Meyer, 2013 and David H. Kamens, 2013) and supporters (Marlaine Lockheed, 2013) of the issue, both supporting their case with plausible evidence. The use of PISA scores for this undergraduate thesis is *only* to provide a window into aspects of the educational systems of the United States and Finland. PISA scores have thus been used to identify the disparity between Finland's and the United States' scores on international tests and to extract the two countries for comparison. The purpose of this study is *not* to increase the United States' scores on PISA. The purpose of

this study is ideally to strengthen an equitable education system in the United States by looking to Finland as an example.

## **Summary**

The rise and intensification of globalism has affected many areas of life, especially education. Nations and education systems, in an effort to out-perform the next, have begun to look to the highest ranked for keys to success. In doing so, the idea of education ‘policy borrowing,’ or more accurately worded as ‘lesson-drawing,’ has grown from a collection of voices. Educators and politicians alike have contributed their thoughts and intentions to international education comparisons, reaching for an understanding of how to imitate the best of the best. Education scholars and researchers have been able to closely analyze similarities and differences between education systems as a whole. Scholars have demonstrated specifics from one country, such as programs, practices, or philosophies, can be adapted, acculturated, and applied in other countries. This undergraduate honors thesis asks what programs or innovations in Finland’s education system have contributed to Finland’s success on international student achievement test. A comparison between Finland and the United States is then implemented to identify if there are similar Finnish trends in the American education system. Because international student achievement tests have established high and low performing education systems in various countries, a comparison in tracking programs and innovations between strong and average ranked countries hopes to help strengthen the United States’ education system.

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## **CHAPTER II**

### **REVIEW OF THE RELATED LITERATURE**

This chapter is a review of the literature relating to components affecting this comparative educational analysis (e.g. PISA, country contexts, program overviews). To begin, an overview of each country, Finland and the United States of America, offers a historical and current perspective of national factors affecting education. Change in educational philosophy and practice often happens in correlation within economic, political, and social changes within the country and the world. Next, this chapter summarizes the literature published on each program selected for comparison, teacher education and specialized support programs. Although there are many strengths and weaknesses of each education system, focusing research on only two programs allows the research to be in-depth within its limited parameters.

Prior research is discussed and included with the following research questions in mind. The first and second research questions address the specific programs: How does teacher education in Finland and the United States compare, and how do the structure and process of implementation compare for Part-Time Special Education and Response to Intervention in Finland and the United States respectively? The last research question, converging and applying between countries, asks how can the United States learn from the Finnish programs in terms of structure, program specifics, and implementation?

## Overview of the United States

The United States' educational system lies within an economic, political, social, and structural context. The progression of educational changes follows changes in other areas of American life. The United States gained its independence from Great Britain in 1776. The Founding Fathers created an independent democratic government to ensure the freedom previously denied to colonial settlers. Therefore, education formally began in the United States as a mode of creating democratic citizens with the ability to think and discuss philosophy and policy. At this time, school curriculum focused on mathematics, reading, writing, U.S. history, English, and occasionally Greek to further support democratic development in citizens (Oakes et al., 2013).

The twentieth century greatly affected education across the world. Specifically in the United States, events like the Great Depression, Industrial Revolution, World War II, the launch of Sputnik, the Civil Rights movement, increased immigration into the country, and more changed the face of education in the United States. Racially, the student population demographic has taken its course through rapid immigration (last 1800s to early-1900s), *Plessy v. Ferguson* (1896), *Brown v. Board of Education of Topeka, Kansas* (1954), and white flight (mid-1900s). The fluctuation between separation and integration of races possibly contributed to the large achievement gap between races today.

World War II and Sputnik largely influenced the shift to innovation and STEM (science, technology, engineering, and mathematics) focused education in the United States. Oakes et al. note the change in school curriculum by stating, “the press and politicians, anxious about falling behind the Russians, lambasted so-called flabby

academic courses in U.S. high schools and thrust upon teachers the job of developing the nation's capacity in science and mathematics—particularly in developing competitive Cold War space and defense technology” (2013, p. 57).

The twentieth century and the age of globalization brought about the rise of accountability. Each president since Clinton continues to bring up the need for accountability, especially for teachers, to bring positive change to the United States' education system. Teachers are held accountable for raising class standardized test scores from the year prior. Test scores, national and international, have become indicators of education performance for both the teacher and the student (Oakes et al., 2013); mediocre test scores on international student achievement tests like PISA between 2000 and 2012 have become indicators of faulty education system in the United States, raising many discussions of reform.

The United States has been identified as being the Western “melting-pot” of ethnicities, origins, races, and languages. This continues into the twenty-first century, as there is a growing population of second language English speakers or English Language Learners (ELLs). This trend contributes to the growing number of bilingual classrooms and schools. In a world of globalization, there is an increasing need to address the challenges of multilingual classrooms.

The United States offers various types of schooling: public, private (religious affiliation, STEM, fine arts, Montessori and more), and charter. Parents have the freedom to enroll their child in whatever type of school they please, although there may be limitations restraining their choice. The cost, location, and availability can limit enrollment. This tends to create a gap between the wealthy and the poor: those who have

choice for education and those who do not respectively.

## **Overview of Finland**

Like the United States' education system, the Finnish education system lies within an economic, political, social, and structural context. The progression of educational changes follows changes in other areas of Finnish life. Finland gained its independence from Russia in 1917. With an emerging sense of nationalism, the Finnish language replaced the Swedish language as the mother tongue (Jaatinen & Saarivirta, 2014). This transition was aided by an increase in effort to educate everyone, specifically in regards to literacy. From this, the Finnish backbone of high literacy rates was established, as seen as Finland excelled in international literacy tests like the IEA Reading Literacy Study 1988-1994 (Salhberg, 2011).

In 1945, when the Second War World came to a close, Finland's economy transitioned from agrarian to industrial to accommodate the need to pay war debts to the USSR. In turn, the labor force that once worked in the fields became highly educated workers in the factory (Jaatinen & Saarivirta, 2014). The education system, now split between elementary and grammar schools, became a channel to provide welfare in order to provide equal opportunity for education (Ahonen, 2002). Also, at the end of the Second World War, "English, "the language of the war winners," started to gain ground" (Jaatinen & Saarivirta, 2014).

Ahonen termed the 1970s in Finland as the "decade of consensus," stating for example, "social justice was one of the most widely agreed goals. National health insurance, universal pension system and a universal unemployment allowance scheme

were established” (Ahonen, 2002). The education reform that began in 1972 was accompanied by political agreement; as Jaatinen and Saarivirta states, “The political parties at the time shared the view that the country needed to provide education for all” (Jaatinen & Saarivirta, 2014). Comprehensive schools, making up 68.95% of schools in Finland in 2014, went through the reform between 1972 and 1977 that resulted in a nine-year comprehensive school (Pekkarinen, Uusitalo, & Kerr, 2009). Jaatinen and Saarivirta bring up the progression of national and foreign language at the time by stating, “Finnish, Swedish and one foreign language (usually English) become compulsory subjects in the national curriculum” (Jaatinen & Saarivirta, 2014, p. 39).

The Finnish banking crisis struck in the 1990s, which resulted in a heightened awareness of importance of the Finnish welfare system, especially the education system. Nokia, a global mobile telecommunications company founded and housed in Finland, reached its apex during this time, assisting Finland in rising above the recession. The emergence of Nokia not only led more adults to become educated than ever before, but it also fostered an environment of innovation in schools from which Nokia would select and hire employees (Salhberg, 2011). This shift can be considered the foundation for autonomy, freedom, and innovation within the classroom, placing more trust in teachers (Jaatinen & Saarivirta, 2014). Even though Nokia has declined in recent years due to the American emergence of Apple and other electronic companies, the values emplaced by Nokia still stand in place.

As of 2014, Finland has excelled on international student achievement tests, such as PISA, through which they have gained the attention of the international education community. Within current-day Finland, there is an assortment of school types: military



academies, folk high schools, special needs vocational institutes, and music schools and colleges (OSF, 2015). Religious institutions were not mentioned as their own category but could be included under “other educational institutions” which consisted of six schools. If all six “other educational institutions” were religious institutions, that only makes up .1% of all schools in Finland (OSF, 2015). Sixty-six percent of 1<sup>st</sup> through 6<sup>th</sup> grade students studied English as a compulsory language (the language used in the classroom for instruction and studying); 99.4% of 7<sup>th</sup> through 9<sup>th</sup> grade students or 161,617 students studied English in 2014 as their compulsory language (OSF, 2015).

The United States of America and Finland shaped early national education to serve cultural purposes: one to form democratic citizens and the other to foster nationalism through a unified national language. Race, language, curriculum, and structural changes correlate with cultural, political, social, and economic changes in a country. Largely, education in Finland and the United States, and every other country, has been and will continue to be used as a mode of transferring current cultural values and needs to the next generation. Even though this is a comparative analysis of similar programs in Finland and the United States, one cannot help but notice the contextual differences between the two countries, as shown in Table 1.

**Table 1.** Contextual and educational overview of the United States and Finland. Data from The World Bank, 2010-2014.

Category	United States of America	Finland
<b>Basic Information</b>		
Independence	1776	1917
Total Area (sq. km)	9,147,420.0	303,900.0
Population	309,347,057.0	5,363,352.0
Government	Republic	Republic
Gross Domestic Product (USD)	14,964,372,000,000.0	247,814,569,536.4
Average Income Per Capita (USD)	48,374.1	46,205.2
Income Inequality (%)*	41.1	27.8
<b>Education</b>		
Official Entrance to Primary Education (yrs.)	6	7
Teachers in Primary Education (Number)	1,794,812	24,736
Percentage of teachers in primary education who are female (%)	87	79
Annual statutory teacher starting salaries in primary public institutions (USD)	36,858	29,029
Government expenditure on education as % of GDP (%)	5	7

\*World Bank defines Income Inequality: “GINI index measures the extent to which the distribution of income or consumption expenditure among individuals or households within an economy deviates from a perfectly equal distribution.

### **United States: Teacher Education**

Unlike its Finnish equivalent, teacher education in the United States is not as often designated as a factor to success for the American education system. Teacher education in the United States has been under scrutiny and reform for many years.

Scholars such as Arthur Levine, Dana Goldstein, Donna Wiseman, Christopher Lucas,

Alan R. Tom, and more are supporters and critics of teacher education; they are critics pushing to strengthen the positive aspects of American teacher education. Wiseman exemplifies this by stating, “The public outcry regarding the performance of our students and the quality of our schools has targeted teachers as one explanation for students’ poor performance in schools and sparked a wide-ranging discussion about variation in teacher effectiveness” (2012, p. 87).

Teacher education in the United States did not evolve until the beginning of the seventeenth century. Until then, religiously involved men or the few men educated at the collegiate level were drawn into the teaching force. Education, in an agrarian society that did not place much value on education, was available to the select few whose family valued and could afford it (Lucas, 1997). The establishment of teacher training colleges was heavily opposed in the beginning. Teaching was not a well-paid or respected profession, thus the dedication of time and money towards teacher training seemed illogical (Lucas, 1997). Training institutes occurring during the summers, although a popular method of further instruction, lasted only a short time until normal schools rose in the mid-eighteen hundreds (Lucas, 1997). Normal schools were training institutions providing three or four yearlong curriculum driven instruction (Lucas, 1997). Lucas believes that establishment of university-based teacher training that has its earliest foundations in 1870s was due to the need to produce highly educated administrators and leaders for educational institutions.

One of the criticisms of teacher education is the acceptance criteria into teacher training programs, specifically university-based teacher training programs. Christopher Lucas referred to the lax acceptance criteria, saying, “If the nation is to have first-rate

teachers, it is said, colleges and universities offering preparatory programs must “tighten up” standards and make admission criteria more stringent. Only the brightest and best applicants should be accepted” (1997, p. 105). Arthur Levine adds to the dialogue saying, “It is true that students who intend to major in education have lower Scholastic Aptitude Test (SAT) scores than other college-bound students” (2006, p. 55). Levine suggests scholars must be critical of this statement due to the various routes of teacher certification one may go through. Those with higher SAT scores may first major in subject areas before participating in teacher training preparation. If this is true, this method would produce highly educated teachers with less training in pedagogy, thus coming back to the university-based or practice-based debate.

### **Finland: Teacher Education**

Many scholars have credited success on international student achievement tests to Finnish teacher education. Satu Uusiautti and Kaarina Määttä find the changes in Finnish teacher education over the years support its current strength, stating, “[there are] key points that are interesting and worth highlighting when contemplating the present features—and the success—of the approaches that characterize [teacher education]” (2013, p. 3). Other scholars of support include, but are not limited to, Olli-Pekka Malinena, Pertti Väisaänen and Hannu Savolainen (2012), Salhberg (2007, 2011, and 2015), and Tiina Silander and Jouni Välijärvi (2013).

Teacher education in Finland, a practice dating back to the 1860s, has its foundation in religion: religious leaders as educators and literacy requirements for sacraments. The push towards national sovereignty and strength as an independent

nation apart from Russia and Sweden in the early 1900s led Finnish people to take pride in the Finnish written and spoken language (Uusiautti & Määttä, 2013). During the latter half of the century, the number of literate citizens mirrored the increase in the number of Finnish citizens becoming educated at higher-level institutions, colleges and universities. Interestingly, teachers have consistently held a level of respect, as they have tended to be among the most educated in Finnish society.

Prior to the 1970s, teacher education, specifically primary-teacher education, took place in teacher colleges with shorter programs and fewer requirements. The Comprehensive School Reform in the 1970s and the Teacher Education Act of 1971 conjointly contributed to the unification of education for all teachers, both primary and secondary, at the university level (Silander & Valigarvi, 2013). A university-based teacher preparation program then became the sole way of becoming certified for teaching in Finland (Sahlberg, 2015). Teach for Finland does not exist, like it does in the form of Teach for America or Teach for Brazil in other countries.

Research-based education is the underlying backbone to Finnish teacher education programs. Pasi Sahlberg states, “a particular principle of research-based teacher education in Finland is the systemic integration of scientific educational knowledge, didactics (or pedagogical content knowledge), and practice to enable teachers to enhance their pedagogical thinking, evidence-based decision making, and engagement in the professional community of educators” (2015, p. 78). The culmination of the research-based education philosophy rests in the master’s thesis. Leading to this apex, theory discussed in the classroom runs parallel to practical application in the classroom. Teacher education candidates are able to abstract philosophical ideas, create theory of

their own, and analyze practicality and results of said theories.

Salhberg divides practicum experience into two categories: small group discussion with other teacher candidates and in-school experience in front of a classroom. Within each category teacher education candidates are to observe, practice teaching under direction and mentorship, and teach autonomous lessons (Salhberg, 2015). In-school experience occurs in either training schools joined to universities or municipal schools staffed with highly qualified mentor teachers (Malinen, Väisänen, & Savoalainen, 2012). Both practicum experiences are spread over the course of university study, starting as early as the first year. In this structure, teacher education candidates are learning and practicing research skills, cooperation with peers and colleagues, and professional development.

As Westbury states, “the aim of such pre-service teacher education- as this is understood in Finland- is to prepare teachers who are aware of the effects of their actions and factors around their work, thus equipping them to control their own activity, and, perhaps, these factors” (2005, p. 477). The Finnish education system prides itself on the autonomy and respect it gives its teachers. As stated above, many scholars contribute this and Finland’s success on international student achievement tests, to the structure teacher education programs. Conjoining theory and practice in a research-based education program solidifies a never-ending professional attitude to discovery and learning. The review of the literature now turns to the second aspect of the education systems in Finland and the United States: specialized support programs within p – 12 education designed to support students who have special learning needs. In the United States, the program explored in this thesis is Response to Intervention. In Finland, it is Part-Time

Special Education.

### **United States: Response to Intervention**

Barbara Ehren et al. say the idea and practical application of Response to Intervention (RTI) in the United States is not concrete in that definitions, practices, and ideals are not uniform in every practicing school, district, or state. The foundational definition of RTI is ambiguous in that the International Reading Association, the National Research Center on Learning Disabilities, the National Association of State Directors of Special Education, and the National Center for Learning Disabilities all have characteristically similar but differently worded definitions (Ehren et al., 2009). Wayne Sailor (2009), using similar vocabulary and structure as the organizations above, defines Response to Intervention: “Response to Intervention (RTI) is best understood as a model used to guide efforts to teach (intervention) based on measures of pupil progress (response) and grounded in the idea of prevention” (p. 3).

The practice of closely analyzing response to various interventions is not a new practice. Some teachers instinctively do this when a student struggles with one method of teaching but not another; the teacher modifies and implements new strategies to best support the student. The International Reading Association first discussed the legal implementation of RTI after recognizing the large number of students labeled with learning disabilities in reading without receiving interventions prior to the label (Fuchs, Fuchs, & Vaughn, 2008). The Individuals with Disabilities Education Act (IDEA), first enacted in 1997 and later reauthorized in 2004, used language that allowed educators to use scientifically-based methods of identification for special needs. Prior to IDEA, the

discrepancy model was the main mode of identification; it did not allow for intervention time before diagnosis. This led to a high number of students identified or misidentified with special needs or learning disabilities. IDEA now gave funding and allowance for early intervention measures to prevent the need for special needs identification.

The common visual construct of Response to Intervention is a triangle, base at the bottom and point at the top, as shown in Figure I. Like the definition of the program, the

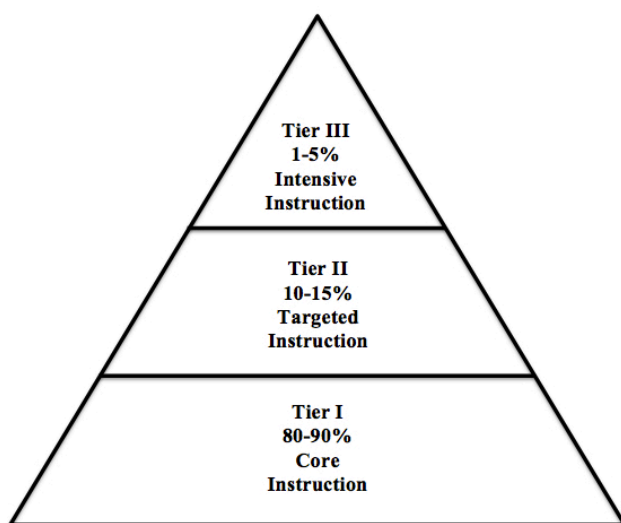


Figure I: Response to Intervention  
Adapted from Fuchs, Fuchs, and Vaughn, 2008.

structure itself is ambiguous.

Timothy Shanahan (2008) states, “There are three-tiered RTI models and four-tiered models, and even with those models not everyone agrees as to what the different tiers may refer to” (p. 106). Most commonly divided into three tiers, each represents a level of

intervention administered to a student. The base, comprised of approximately 80% of the student population, receives minor intervention throughout the day. Students can receive this intervention as the teacher circulates the classroom throughout the lesson making minor individual or collective adjustments to academics or behavior. Tier II, intensified support or targeted instruction, is given to approximately 10% -15% of students.

Students in tier II meet outside of the classroom and instructional time in groups of usually two to five for group instruction with a teacher (Mellard, McKnight, & Jordan, 2010). Tier III, controversial in definition and application, is considered either the last



intensified intervention before identification or identification itself.

Students in the United States do not need an Individual Education Plan (IEP) to receive instruction under the RTI model. That is just it; students are receiving various intervention methods in RTI to delay identification with special needs or a learning disability. Douglas Fuchs, Lynn Fuchs, and Sharon Vaughn argue an educator's philosophy regarding RTI can be understood through how many tiers they believe to comprise RTI: "Those who see RTI as mainly about disability identification want fewer tiers. Those who see RTI primarily in terms of early intervention and prevention want more tiers" (2008, p. 3).

Ehren et al. created a list of all who could possibly be involved with Response to Intervention: "classroom teachers, special education teachers, speech-language pathologists, reading specialists, reading coaches, school psychologists, administrators, occupational therapists, physical therapists, educational audiologists, librarians, parents, office personnel, and even outside professionals" (2009, p. 11). This diversity of involvement is characteristic of practice of RTI: attempting to construct various interventions, even when not in the specialty of the teacher. A student thus receives well-rounded attempts at soliciting positive responses to interventions.

Response to Intervention in the United States is influential when it comes to language acquisition and reading abilities. Especially with the high number of English Language Learners (ELL or those who are non-native English speakers), misidentification is common: "When an ELL is struggling in school, it is difficult to distinguish between a language difference and learning disability" (Hudspath-Niemi & Conroy, 2013, p. 5). Practicing delayed identification through RTI enables the RTI

intervention team, teachers, school psychologists, and more, to understand the barriers in a student's English acquisition. Since RTI includes an element of behavioral intervention, ELL students' behavioral problems triggered by cultural shock, exclusion among peers, or language acquisition difficulties will receive interventions alongside academic intervention.

### **Finland: Part-Time Special Education**

The 2000 PISA presented a newly identified phenomenon in the Finnish education system: low variance between the highest and lowest performing students. Subsequent PISA tests showed similar results. The 2006 test displayed a chart measuring low between-school and within-school variance for Finland, specifically achieving the lowest in 'total between-school variance' at 4.7% of "average variance in student performance" (Executive Summary: PISA 2006, 2007). The most recent results from the 2012 PISA test continue this trend showing that Finland's 'variation in mathematics performance between schools' was 530 where the OECD average was 3,126. Many scholars, such as Itkonen and Jahukainen, Salhberg (2015), Kivirauma and Ruoho (2007), and Takala, Pirttimaa and Törmaänen (2009), have noted this phenomenon in low variation and have attributed it and part of Finland's overall PISA success to part-time special education in Finland.

The origins of part-time special education lay within two larger phenomena: the Comprehensive School Act of 1968 when Finnish schools transitioned from a two-track system of separate elementary and middle schools to a nine-year comprehensive system (Kivirauma & Ruoho, 2007) and the Special Education Strategy adopted in 2010

(Thuneberg et al., 2014). Due to the heterogeneous classrooms constructed under the Comprehensive School Act comprised of students at all academic levels, students who were previously separated into the academic and vocational tracks were now in one

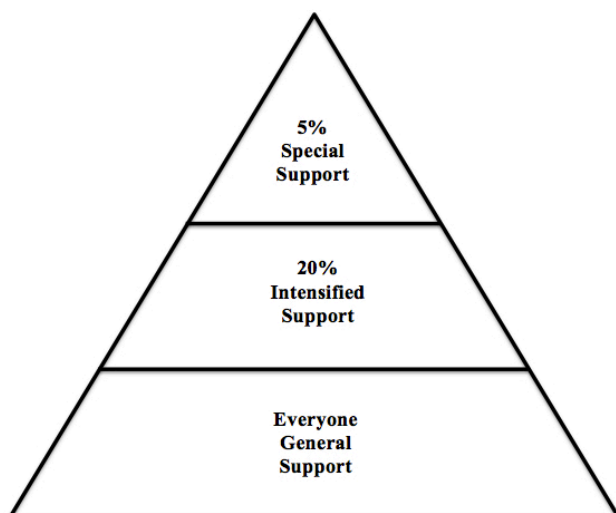


Figure II: Special Education Strategy  
Adapted from Thuneberg et al., 2013.

classroom setting. This created a demand for extra support to keep the lower achieving students at the regular curriculum pace (Kivirauma & Ruoho, 2007). Over the years, the number of referrals to special education skyrocketed. Thus, a necessary reform to the special education system took place. The

new Special Education Strategy (SES) was officially adopted in 2010 but first talked about in 2007. Between those years, the structure of SES was established in the triangular form shown in Figure II. General support takes place within the classroom where a teacher takes time to attend to individual student needs on the spot. In-depth intervention is not administered at this time, so if a student does not quickly respond to the teacher's intervention they are moved to the second category, intensified support. Sahlberg (2015) defines the practices of the second category by stating, "[it] consists of remedial support by the teacher, co-teaching with the special education teacher, and individual or small-group learning with a part-time special education teacher" (p. 66). When students still do not respond to intensified support, they are moved to special support, which varies between students. This category can look like inclusive

intervention within the classroom or segregated intervention in a special needs room. It is important to note that there exists a distinction and a divide between part-time special education and full-time special education in Finland. Finland serves students with mild to severe disabilities under Individualized Education Plans (IEPs) and separate funding like many Western education systems. These students are usually served in separate classrooms or, in rare cases, schools. These full-time special education students are sometimes included in the upper tier of the new Special Education System, whose reform was touched upon earlier.

Recipients of part-time special education differ in that they do not need an IEP or a labeled disability (Hausstätter & Takala, 2007); Takala et al. (2009) states, “[part-time special education students] do not have special education status; they are not considered disabled, but they are in need of short-term special education” (p. 162). For example, a student with low second-grade reading comprehension scores may not be autistic or dyslexic but only need one-on-one assistance to perform at grade level. This student would benefit in short-term special education for whatever amount of time it takes to get to second-grade reading level.

The distribution of student receiving services from part-time special education is heavily concentrated in the earlier years of education, as early as pre-school. Early intervention, as it is talked about in many countries within the realm of special education, is ideal for the most influence, and it is a trademark for the successful part-time special education program. Hausstättera and Takalab state, “early intervention is not regulated by law in Finland, but this strategy is seen as best practice and has long been part of the Finnish special educational culture, and is part of the new national strategy on special

education” (2011, p. 162). The prior statement reaches the broader lengths of the special education system in Finland, but statistical data for part-time special education follows in line: 2% of pupils receiving part-time special education are in pre-school and 74% are in primary school (Hausstattera & Takalab, 2011). There is a decrease in pupils participating in part-time special education in secondary school, the age (15-years-old) when pupils take PISA, but it is important to remember that these 15-year-old probably received intervention earlier in their schooling career.

Joel Kivirauma and Kari Ruoho emphasize the language concentration and quality teacher preparation specifically for the part-time special education program. Finland has a higher proportion of students focusing their part-time special education efforts on language, specifically the written and spoken uses of the mother tongue, Finnish (Kivirauma & Ruoho, 2007). Takala, Pirttimaa, and Törmänen (2009) support this by stating roughly 54% of primary school student received part-time special education in 2007 due to reading and writing difficulties. Takala et al. list other main reasons for students’ involvement in part-time special education: foreign language, behavior, speech and language, mathematics, reading and writing, and other (2009). The 1960s to the 1970s also brought about a renewed interest and vigor for unifying and strengthen the teacher training programs at universities, which held a path for teachers for part-time special education. Kivirauma and Ruoho draw a connection between the strength of the part-time special education program and the teacher training for the program. Kivirauma and Ruoho state, “since 1979, the training of teachers of part-time special education has been developed into an independent, full-scale (four years) academic programme” (2007, p. 290). This is followed up with the overall increase in special education teachers since

the creation of part-time special education.

## CHAPTER III

# METHODOLOGY

### Research Questions

The research questions guiding this thesis are:

- 1) How does teacher education in Finland and the United States compare?
- 2) How do the structures and processes of implementation for Part-Time Special Education (Finland) and Response to Intervention (United States) compare?
- 3) How can the United States learn from these Finnish programs in terms of structure, program specifics, and implementation?

### Research Design

The importance of the research design relating to this thesis is two-fold: its formation as a case study and its focus on qualitative data. A case study, as defined by Sharan B. Merriam, is “an intensive, holistic description and analysis of a single entity, phenomenon, or social unit” (1988, p. 16). Part-time special education, Response to Intervention, and both teacher education programs are bounded programs currently resting in and affected by the context of Finland’s and the United States’ education systems and countries as a whole. A case study is designed to allow in-depth descriptive discovery of influential factors. There are many factors outside of the education system that affect the results of any student’s education, such as economics, race, geography, and more. Due to the inability to remove these factors when testing the strength of an education system, the researcher must keep the programs and their results within the

context of many limitations. If abstracted, a program and its results would lose the foundation from which it should be truly viewed, thus the researcher acknowledges outside factors while analyzing internal factors. The researcher can use inductive reasoning to create a descriptive analysis based on a literature review and an interpretive analysis based on collected data. The application of a case study, specifically this case study, can influence the formation and application of other cross-cultural studies.

The intended results of the thesis, the exchange and implementation of international education practices and implementation methods, foster the use of qualitative data. Sharan B. Merriam (1988, p. 19) states, “Qualitative researchers are primarily concerned with process rather than outcomes or products. How do certain things happen? What is the “natural” history of the activity or event under study? What happens with the passage of time?” This thesis is not looking at the outcomes produced by each program, but rather, it is looking at the progression of implementation, application, and modification. Data sources for the case study included participant interviews and content analysis of documents. University of Dayton Institutional Review Board approval was obtained for the research, and all procedures were followed for exempt research. Since qualitative research rests heavily on interviews, the researcher becomes the vessel through which data is collected, sorted, and analyzed.

## **Participants**

Participants were chosen on the following criteria: experts in comparative education and educators and scholars familiar with the targeted programs in the United States and Finland. Participants were solicited for in-person, phone, Internet



videoconference, or email interviews through email or phone invitations. A majority of the participants solicited for this study were chosen due to location convenience in relation to the researcher. No compensation was given to interview participants, other than the satisfaction of contributing to the research in the field of education and genuine appreciation from the researcher.

### **Data Collection**

Data was pulled from two overarching categories: interviews and document analysis. Interviews include participants from varying categories: educators, school administrators, scholars, leaders, and comparative education experts. Interviewees were provided with a set of questions prior to the interview (see Appendix A) and were provided with an invitation to participate (see Appendix B). Throughout the interview, the researcher asked both the arranged questions and impromptu questions for further expansion. Each interview was recorded via a digital voice recorder and later transcribed by the researcher. All data collected from interviews were kept in two places as specified on the IRB application: on an audio-voice recorded or paper forms locked within a safe located in the Teacher Education Department at the University of Dayton (paper data and audio-recorder) or on a password-protected laptop (digital data).

In conjunction to interviews, documents were collected as the main basis of gathered data. At the beginning of the research process, a large amount of primary sources were collected as a preliminary data collection. Throughout the process, primary sources were narrowed down to a select amount based upon applicability and relevance to this undergraduate thesis. In the end, the sources included documents such as district

policy guides, universities' teacher education curriculum, and government documents relating to programs. Primary source documents are published as public information, thus not needing written permission to use.

Interviews were only completed for Response to Intervention in the United States. Although solicited, interviewees related to Part-Time Special Education declined for various reasons: inability at allotted time, inability due to bureaucratic constraints, or declined to respond. Due to the limited collection of interviews, interviews were used as an augmentation of findings from the document analysis. Interviews for Response to Intervention gave a personal perspective to the application of the program.

Throughout all interview records, participant names are replaced by their professional role to achieve confidentiality and anonymity: teacher, school administrator, scholar, etc. Affiliated organizations and school names were also kept confidential through the use of numbers (1, 2, 3, etc.) or titles (urban school 1, national organization 1, etc.). No names were used in any published findings.

### **Data Analysis**

Data analysis is the act of compiling and organizing data to evaluate and/or describe the data as a whole. Lacking practice in data analysis, the researcher relied heavily upon John W. Creswell's 2002 *Educational research: planning, conducting, and evaluating quantitative and qualitative research*. Being a qualitative case study, this thesis utilized practices in chapter 8 (*Analyzing and Interpreting Qualitative Data*) of Creswell's book. Discussed below, data analysis transpired through three steps: organizing, creating codes, and creating themes.

Much like data collection, the organizational phase of data analysis consists of grouping like sources together for better understanding and analysis. Sources were printed as hard copies, allowing the researcher to make notes and physically group. All interviews regarding Response to Intervention were grouped together, documents relating to Finland's teacher preparation programs were grouped together, and so on. Grouping like sources allowed the researcher to easily identify similarities and trends among the sources.

The second step, coming after data organization, is coding. As defined by John Creswell, codes are "labels used to describe a segment of text or an image" (2012, p. 244). Picking out the trends within a document, the researcher sought out text segments regarding formation, implementation, application, or modification. Key points or-segments in each source would be circled, highlighted, noted, or boxed. Alongside the specific text would be a code, a single or small set of words categorizing the main idea of the specific portion of text. Examples of codes used are 'early intervention,' 'application process various,' 'highly selective,' and more. Although many codes were used in the beginning, repetitive codes became apparent. These highly repetitive codes translate into themes.

As defined by John Creswell, themes are "are similar codes aggregated together to form a major idea in the database" (2012, p. 245). Once all sources were read and coded, like codes for each program would be grouped together into larger categories or ideas. Examples of themes used are 'flexible within structure,' 'thorough selection process,' and 'continuous development and support.' Overall, the multitudes of codes

were reduced down to seven main themes. Themes allow the researcher to point to findings based on the prevalence of the themes within the data.

### **Research Process**

The research process began in the fall of 2014, under the direction of Dr. Patricia Hart at the University of Dayton. Through the structure of an academic course under Dr. Hart's direction, the researcher was able to identify and modify a research topic and set of questions for this undergraduate honors thesis. By the spring of 2015, the researcher began working exclusively under the advisory of Dr. Katie Kinnucan-Welsch at the University of Dayton.

Upon the formation of the three research questions, the researcher concluded it necessary to include three different stages of research and understanding: literature review, interviews, and document analysis. The literature review served as a solid foundation for the growth of this thesis. Used as a backbone for understanding and direction, the literature review offered extensive background on what other scholars have already researched and written about the topics of this thesis. At the beginning of the literature review, the researcher did not fully understand the numerous factors affecting comparative education, let alone education as a whole. The literature review surfaced many of these factors, bringing to light policy cherry-picking, fundamental international differences, fundamental international educational differences, controversy of student achievement tests, and more. All factors identified could not be included in the literature review or thesis due to constraints relating to an undergraduate honors thesis—time,

funding, and IRB limitations. All factors identified have and will continue to contribute to the formation of the researcher as an educator and scholar.

The literature review led the researcher to conclude interviews and document analysis were necessary for understanding the complexity of all programs and comparative education. To protect the rights and privacy of participants, the researcher gained approval by the Institutional Review Board (IRB). Dr. Katie Kinnucan-Welsch submitted the fast track form, the invitation to participate, and the list of interview questions to the University of Dayton's Institutional Review Board on May 6, 2015; the request was approved May 11, 2015. The researcher then began to solicit interviews.

The researcher was accepted into the 2015 Berry Summer Thesis Institute through the University of Dayton's Honors Program. The institute provided the researcher time, funding, and support to continue intense and in-depth research. During the summer of 2015, the researcher refined Chapter 1, completed the review of the literature (a variation of which is found in the published proceedings for the Berry Summer Thesis Institute 2015), obtained IRB approval at the University of Dayton, solicited interviews, conducted multiple interviews, and drafted this methodology chapter.

Much like the review of the literature, the entirety of the interview process varied slightly from original planning. The researcher noticed in the first interview certain topics surfacing that were not covered in questions formerly approved by the IRB. Topics such as funding, minority students, and Tier III were important to interviewees engaged in programs, thus interview questions about each topic were spontaneously formulated.

Extremely important in the research process was a period of resistance between the researcher and the research topic. Roughly between January 2016 and June 2016, the

researcher became overburdened by the research topic, explicitly the use of international achievement tests and the relevance of comparative education. Having gained various perspectives on international achievement tests from various documents, scholars, mentors, and more, the researcher became skeptical of their ability to rank one education system above another. The resistance between the researcher and the research topic inhibited steady progress in research and development during the six-month course.

July of 2016 proved to be a critical turning point for the researcher. The researcher was completing a month of study abroad in London, England at the time, completely immersed in an international education system at the elementary, collegiate, and government levels. She understood her research, although founded upon something she no longer believes has validity, showed a progression of herself as a scholar. The researcher started as a freshman in the fall of 2013 with an interest in education in other countries, and the researcher finishes in the fall of 2016 with a more developed, yet still evolving, understanding of education and its complexities.

## **Summary**

Every act of research follows a specified set of guidelines and procedures, producing an articulated path of discovery that can be replicated. This specific research project is modeled as a qualitative case study, looking at only two countries through the lens of interviews, document collection, and other primary sources. Due to the nature of qualitative research, the researcher plays a heavy role in the interpretation of the data collected. The researcher is the vessel through which the data is collected, filtered, and presented to the reader. Data, an important part of creating original research, has been

collected from various primary sources such as government documents, curriculums, interviews, and more. All participants are protected under the University of Dayton's Institutional Review Board, through which all arranged interview questions were preapproved. After the data collection, the research began coding and theming all sources, looking for overarching commonalities or trends. These few themes would point to specific findings, to be later discussed. Everything from designing the research model to the analyzing the data served as various steps in the transformation of the thesis and the researcher as an academic. As this thesis grew and expanded, so did the researcher in many ways. This thesis in its entirety articulates who the researcher has become over a period of time and their current understanding of comparative education between Finland and the United States.

## CHAPTER IV

### RESULTS

#### Research Questions

The research questions guiding this thesis are:

- 1) How does teacher education in Finland and the United States compare?
- 2) How do the structures and processes of implementation for Part-Time Special Education (Finland) and Response to Intervention (United States) compare?
- 3) How can the United States learn from these Finnish programs in terms of structure, program specifics, and implementation?

Education evolves as the context it is embedded within evolves. Through interviews, district policy guides, universities' teacher education curriculum, and government documents relating to programs, key elements of both teacher education and special education support structures became clear. Two major themes addressing teacher education are thorough selection process and strong emphasis on research. The two major themes addressing special education support are physical structure and readiness. One major theme was applicable to both teacher education and special education support: national guidelines vs. local implementation.

#### Special Education Support

The readiness of a school to accept change and new-implemented progress will be a determining factor in the success of the implementation and program. Not only does



the structure need to be flexible enough to accommodate the change, but the individuals supporting and using the program also must be prepared for the change in order to guarantee success. The voices of administrators of Response to Intervention in the United States highlight the necessity to look towards the strengths of Part-Time Special Education in Finland. Both American and Finnish personnel articulate the strengths, weaknesses, and ongoing developmental needs of Response to Intervention in the United States. Trying to expand a method of instruction intervention that benefits all students, there are certain strengths and weaknesses to the American implementation of Response to Intervention. The voices of those directly involved in the method of instruction, from the school-building level to the national level, accentuate the highs and lows of RTI.

Since the publication of IDEA in 2000, Response to Intervention has established its foundation in many classrooms. With a solid foundation, the practice has proven its many strengths. As mentioned earlier, Response to Intervention lacks a certain degree of uniformity in practical application across the country, while still holding flexibility within its universal structure to meet the varying needs of schools. Some believe the flexibility and lack of uniformity is a strength in that it enables to schools to mold the instruction into what best fits their needs. An interviewee of a national organization relating to Response to Intervention expresses this idea by saying:

I don't think that anytime everything, anything will be used in every school because that comes back to the question of we have a local control of public schools; furthermore it shouldn't be because what is needed in a poor urban school in New York City is not necessarily the same thing that is needed in a rural one school building in rural Alaska. (National Organization Interviewee, 6/3/17)

The belief of RTI's strength through flexibility at the national level parallels the belief at the district level. Just as the national level articulates requirements to a certain degree to allow variation, the district also allows for the same variation to accommodate differences among school buildings. One district level interviewee speaks of their district's RTI structure stating, "We still don't have uniformity, and I don't know if we want absolute uniformity. I don't think that's appropriate" (District Interviewee, 6/16/2017). Although flexibility within structure is among a multitude of strengths exhibited in RTI, its importance becomes irrefutable as educators at various levels speak of its greatness.

While Response to Intervention can provide a wide array of benefits to individual students and education structures, it does not go without its deficiencies. Still in its infancy since its creation in 2000, the structure of Response to Intervention among schools varies in such a way that its lack of structure contributes to a variation in the success of the intervention from one school to another. The definition of and support for each instructional tier varies from building to building. One individual at the school building level articulates the need to give appropriate structure and definition to each tier when stated, "They [school teachers] have this idea of what I would consider a tier 3 kind of conversation but they're not implementing solid tier 2 interventions with fidelity and integrity" (School Building Interviewee, 6/10/17). If each tier were to be clearly defined and structured, the teachers and instructional head at this one individual school would be able to provide a well-functioning Response to Intervention instruction.

Going forward to better support Response to Intervention in the future, current instructors using RTI have stated the need for stronger preparation in teacher preparation

programs. The current preparation is slightly lacking in that it is not clearly or adequately addressed at the university level. An instructor using RTI at the school building level reflected on their university exposure to RTI when stating, “nobody gave a good ‘this is what it looks like’ and I think, for me, I needed to see that” (School Building Interviewee, 6/10/17). The ideal for teacher preparation programs, like every other aspect of the program, is to provide teacher candidates with the necessary knowledge and exposure that enables them to best adapt to situational contexts. A member of a national organization relating to Response to Intervention said, “In teacher prep programs students are preparing to learn about RTI so that they can be prepared when they go into a school so they can be adaptive to it if it is a program in their school” (National Organization Interviewee, 6/3/17).

The Basic Education Act of 1998 outlines the proper Finnish education to be provided to every student in the country. Within the act, specifics are outlined for who is allowed to provide education, the length of one school year, language of instruction, and more (Basic Education Act 628/1998). In 2010, the Special Education Strategy (SES) was adopted in Finland. This strategy created the tier structure of Part-Time Special Education. The influence of the Special Education Strategy can be found as Section 16 of the Basic Education Act was added as an amendment in 2010. Section 16, ‘remedial teaching and part-time special-needs education,’ states the following two points:

1. A pupil who has temporarily fallen behind in studies or otherwise needs short-term support in learning shall be entitled to remedial teaching.
2. A pupil who has difficulties in learning or in school going shall be entitled to part-time special-needs education. (Basic Education Act, 2010)

The United States of America published the Individuals with Disabilities Education Act in 1997. The act sought to provide all students in the United States, with disability or not, a quality, public education free of cost. In order to do so, certain structures are set into place to ensure a quality education is provided through certain processes and structures. Of the disabilities included within IDEA is any behavioral or academic disability that may inhibit content learning. Such a disability can and would be included and addressed through Response to Intervention. IDEA alludes to the possible use of Response to Intervention to support learning by stating:

In determining whether a child has a specific learning disability, a local educational agency may use a process that determines if the child responds to scientific, research-based intervention as a part of the evaluation procedures described in paragraphs (2) and (3). (IDEA, 2004)

Both Finland and the United States hold a fine line of national and local governing when it comes to education. Finland has a Ministry of Education and Culture that states on its mission on its website's homepage as, "Within the Finnish Government, the Ministry of Education and Culture is responsible for developing education, science, cultural, sport and youth policies and international cooperation in these fields" (Ministry of Education and Culture). The United States Department of Education is a federally run agency whose mission statement states, "ED's mission is to promote student achievement and preparation for global competitiveness by fostering educational excellence and ensuring equal access" (U.S. Department of Education). Both of these mission statements are built upon flexible and theoretical vocabulary such as 'for developing' and 'to promote.' Neither of these verbs alludes to the practicalities of implementation or

enforcement of educational practices. This is where the fine line of national and local educational governing comes into play. Local governments, such as states, cities, and individual schools, breakdown the definition of practices and implementation.

Finnish local governments in the form of cities have the ability to define and implement Part-Time Special Education in ways they see best fit of their local education jurisdictions. The city of Helsinki and the city of Espoo both articulate the application of educational support within their school systems, including a wording variation for a Part-Time Special Education definition. Specified by the city of Helsinki, intensified support is: “provided for a pupil who needs regular support in his/her schoolwork or several types of support simultaneously” (City of Helsinki). Rather, the city of Espoo states intensified support is, “The supportive measures of intensified support are more regular and can be combined with other measures” (City of Espoo). Although both refer to intensified support, one is more built in terms of structure than the other. The city of Helsinki specifies ‘schoolwork’ and simultaneous support; the city of Espoo specifies only that the intervention is ‘more regular.’

Much like its Finnish counterparts, the specific wording enabling the use of Response to Intervention in the United States varies from state to state. Included in a majority of state legislatures under ‘Specific Learning Disabilities’ (laws using this specific wording could not be found for Arizona, Connecticut, Louisiana, Maryland, Massachusetts, New York, and North Dakota), a ‘scientific, research-based intervention’ is available to students prior to special education identification. By using vague wording, individual districts and schools have the ability to choose from an array of ‘scientific, research-based interventions,’ one of which can be Response to Intervention.

For example, the Ohio Department of Education has specific legislation addressing evaluations for students with special needs. Prior to special needs identification, a school and its teachers must follow specified referral steps. These steps are specific enough to identify a struggling student but broad enough to allow schools to make individual choices of implementation. Indirectly referencing the possible use of Response to Intervention during the referral process, the Ohio Department of Education legislation 3301-51-06 states, “An evaluation may utilize a process based on the child’s response to scientific, research-based intervention to determine whether a child has a specific learning disability” (Ohio Department of Education). As mentioned before, Response to Intervention is a ‘scientific, research-based intervention’ that appropriately fits the referral requirement in Ohio, along with other states.

### **Teacher Education**

The United States offers two paths for teacher education: university-based and practice-based. The Council for the Accreditation of Educator Preparation, formed from the merger of the National Council for Accreditation of Teacher Education and Teacher Education Accreditation Council, accredits a majority of the university-based teacher education programs in the United States. In these institutions, teacher education is often housed within a unit or department specializing in teacher preparation. Teach for America, the Boston Teacher Residency, the Registered Teacher Programme, AmeriCorps Teaching Fellowship, the NYC Teaching Fellows, and more are practice-based options outside of a university-based program. These programs offer teacher certification in shorter amounts of time whether one has or has not received prior teacher

preparation. This thesis does not delve into the debate between the two teaching pathways, but looks solely at the prominently taken pathway in the United States: university-based teacher education.

There are 1,200 teacher education programs in colleges and universities across the United States (Levine, 2006). Although university-based teacher training is the most common method of training across the United States, program specifics vary widely. Application criteria, levels for certification, endorsements offered, amount of practicum time, and more vary from one program to another. Generally, early childhood education, middle childhood, and high school education are the three levels certification in teacher training programs. Alverno College, as mentioned by Arthur Levine, offers the following levels of certification for their respective state: “early childhood, elementary, middle school and secondary teaching” (2006).

After acceptance and certification, the curriculum and practical experience also varies across programs. In university-based teacher training programs, there is supposed to be a balance between the two: theory and practical experience. Arthur Levine brings up: “Students have limited clinical or field work experience today in most teacher education programs; it consists only of the short time spent student teaching” (2006). Being an area of reform, Levine criticizes the balance between theory and experience saying the following problems exist: professor involvement in constructive feedback, poorly placed field placements, and poor execution of connection between theory and practical experience (Levine, 2006). More recently, the National Council for Accreditation of Teacher Education (NCATE) along with Arthur Levine has begun to strengthen the clinical experience of teacher education programs (NCATE, 2010). A board of teachers,

politicians, administrators, and more have looked into how to strengthen the weaknesses of the common clinical experience, such as structure, time, and more.

A university-based teacher preparation program in Finland is at minimum 5-years in length: three years to acquire a bachelor's degree and 2 years for a master's degree, with a master's thesis (Sahlberg, 2015). The master's thesis contributes to many aspects of teacher development. Sahlberg (2007) believes that a master's thesis empowers the educator to continue in various levels of the field of education other than teaching. This removes the constraints of immobility that can exhaust teachers within the first few years of teaching. A master's thesis also contributes to the notion of research-based education many Finns value as a strength in the teacher education program.

The structure of teacher education in Finland lies in eight universities spread across the country. Sahlberg states, "All eight Finnish universities that offer teacher education have their own nationally coordinated teacher education strategies and curricula, ensuring coherence but encouraging local initiative to make the best use of each university's resources and nearby opportunities" (2015, p. 111). The objective of teacher education in Finland is thus uniform across the country. Categories of teaching levels are broken down as follows: general class teachers cover grades one through six, while subject teachers cover grades seven through nine (Uusiautti & Määttä, 2013). Categories for kindergarten, vocational, and special education are included as tracks in teacher preparation programs, but these three categories are not pertinent to this thesis. Again, all teacher tracks take place in a research-based university structure, concluding in a master's thesis.

The application process to one of the eight government-funded Finnish teacher



education programs at the university level is broken down into three stages: First, at the nation-wide level, students participate in an exam. The purpose of the exam, according to Silander and Valigarvi, is to measure candidate's ability to understand, analyze, and apply knowledge to educational practices (2013). Scores are distributed to universities where the second stage takes place. Unique to each university, interviews are conducted to demonstrate cooperation, creativity, and adaptability to the teaching profession. Stage three is a culmination of the candidate's academic and personal resume, combining Matriculation Examination scores, stage one scores, upper-secondary school extra-curricular activities relating to education, and more (Sahlberg, 2015). It is at that point one is either accepted to or denied from a teacher preparation program.

## **CHAPTER V**

### **DISCUSSION AND IMPLICATIONS**

#### **Research Questions**

The research questions guiding this thesis are:

- 1) How does teacher education in Finland and the United States compare?
- 2) How does the structure compare between Part-Time Special Education and Response to Intervention in Finland and the United States respectively?
- 3) How can the United States learn from these Finnish programs in terms of structure, program specifics, and implementation?

#### **A Tale of Two Countries**

The purpose of education is within the eye of the beholder. For some, it is for the students. For others, it is for the country. Regardless of the perceived purpose of education, the best education is provided as educators create and exchange information and ideas. Learning from other strong teachers and practices builds the foundation to move forward and become better. Never should it be belittling to an educator to look to the best in order to provide the best their own students. Exemplary teaching and educational practices should thus be shared, not contained for self-glorification and identification. In recent years, the practice of sharing highly successful instruction methods has expanded from the individual level (among teachers) to the international level (among countries). Many have sought out the ways of others, in order to provide better education for their own. Finland has been one such point of education to which

many heads have turned, the United States being one of them.

As the United States looks to Finland for their strengths within special education support and teacher education, the United States must be cautious as to how much they directly pull from Finland. The contexts between the two countries – economically, politically, racially, religiously – add to the complex differences within the two education systems. Much like education within the classroom level, one single instruction practice will not work for every single student. One single program from Finland will not work perfectly for every country, and that program will not work perfectly for every school throughout the United States. That being said, if a program is correctly modification or left open enough for flexibility in implementation, the program could be tailored to fit the needs of its implementers. Special education support in both countries are serving the same populations and general needs. Due to the differences in each country's education system, the programs vary to fit their setting's requirements.

Teacher education in both countries is much like the special education support, different but similar in many ways. The differences between the two countries are due to differences in requirements from the education systems. Unlike the special education support, teacher education structures are similar within the context of a university setting. The United States' unique inclusion of a diversity of teacher certification routes makes it impossible to strengthen teacher education overall based upon the Finland's practices. Alternative routes of teacher certification in the United States disconnect the university structure and universal experience of teacher preparation that could create a strong, national teacher preparation. Speaking then exclusively within the university setting, the structure within the United States would need only modified by number of hours or

timeline of practices. Compared to the United States, Finland's increased number of practicum hours within a classroom contributes to a teacher candidate's exposure to application of educational theory. Exposure to different methods, cooperating teachers, and unique circumstances of daily occurrences prepares the teacher candidate to be versatile in instructional methods. Along the same lines, the schedule of practicum hours and university classes creates a difference that strengthens Finland's teacher education system over the United States'. The United States should switch to Finland's flip-flop between university classes and practicum experience a teacher candidate experiences each year. Rather than the United States' disbursed hours of observation while also taking university of classes does not allow the teacher candidate to delve deep into extended practice of teaching. Finland's structure of providing teacher candidates with semesters of university classes or practicum experience could be replicated in the United States. These changes could contribute to a stronger teacher education system.

### **Recommendations**

The last of the three research questions guiding this thesis asks how can the United States learn from these Finnish programs in terms of structure, program specifics, and implementation. As much as the intention of this thesis was to give a conclusive, concrete guideline as to how the United States could and should transfer specific aspects of Finland's teacher preparation program and Part-Time Special Education instruction, the results of this thesis prove otherwise. The researcher has concluded the complexity of this intention is too much to effectively transfer Finnish practices to the United States at such a large scale.

The United States' education system is complex in of itself, debatably one of the most complex in the world. Needs for instruction and variation in education vary just as greatly as the location, demographics, language, and religion of United States' citizens. Creating a guide for a one-size-fits all, clear path of progress is thus challenging, if not impossible. For example, one reason the implementation of any program in New Orleans, Louisiana will differ greatly from the implementation program in the middle of Wyoming due to the state requirement differences for any given education topic, like Special Education.

Moving forward, individual universities, schools, and districts carefully evaluate programs and contexts of other settings prior to implementing in their own school setting. The small-scale of each of these entities allows them to pick-and-choose which aspects of Finnish programs and implementation processes will best fit their individual context. The needs and frameworks of each of these entities may parallel the context of Finland's education system; if this is so, the implementation process may be easier due to greater similarities. Again, it must be an individual decision to apply these findings in order to yield the best results. A receptive environment to change in terms of willingness for change and ability to change will make a great difference in the success of change, especially as change in this situation is coming from the international level.

The researcher hopes the findings of this thesis do not deter one from learning from other education systems, but rather to be critical in determining what is best for students and education systems as a whole. Standardized tests, although used as the basis for country identification in this thesis, are not conclusive indicators of successful education systems. If anything, standardized tests may only indicate the country's ability

to take tests well, not their ability to be creative and innovative leaders. Other countries that may not have scored as well as Finland on PISA, such as Greece and Indonesia, may have extremely profound instructional methods to shape active citizens or build leadership development with students.

The United States can become better in education just from looking among its own educators and institutions. Top ranking teachers and schools exist within the States. The University of Dayton, speaking from the personal experience as the researcher, makes a personal investment in every teacher candidate throughout his or her four years in the teacher preparation program. The Ron Clark Academy in Atlanta, Georgia drives students to excel in their education through high-energy motivation and imaginative education. Countless teachers in public, private, and charter schools across the United States spend hours upon hours preparing excellent lesson plans while collaborating with their peers. As much as the United States can learn from other countries and their different practices, the United States can learn equally if not more from itself and its own diversity of education across the nation.

So how can the United States learn from Finland? The better question may be how can the United States and Finland learn from each other? If the United States and Finland both have exemplary points of their respective education systems, both should be highlighted and sought after with equal amounts of vigor and respect. This thesis is an indication that not everything can be shared through a clean-cut process, but rather the sharing of ideas and practices is messy and complex. The more knowledgeable all professional individuals related to the programs are, the more probably of success the program has. The intent of this thesis is thus to educate individuals on the differences of

Finland's and the United States of America's education systems, highlighting two key elements of both, and acknowledging the complexity of international policy sharing and implementation. Not that it cannot or should not be done (policy sharing), but that it should be done with extreme investment and understanding.

### **Further Questions**

During the course of research, the complexity of international education brought about more questions that delved further into the topic. Answering these questions would enhance the importance and implication of the research included in this thesis. Is there a way to measure the legitimacy of international tests? What would be the definition of legitimate? If looked at from a singular, local level, how would one school's implementation of Part-Time Special Education or teacher preparation in Finland compare to Response to Intervention or teacher preparation at the school building level in the United States?

The researcher was also stretched academically to think beyond the confines of this thesis topic. Understanding the complexity and immensity of education within the United States, the researcher formulated questions around other aspects of education. These questions may become the foundation for future research. Is there a correlation between the sustained duration and success rate of reforms in the United States at district, state, or national levels? To what extent does international test taking affect daily and/or yearly curriculum instruction? Is there a way to measure the short and long-term effects of the various teacher preparation/certification routes within the United States (Teacher for America, four-year university initial teacher preparation, ACE, etc.)? These questions

will lead to improved education for all students.



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## APPENDIX A

### INTERVIEW QUESTIONS

**Note: The following questions are applicable to either program of study (Finnish part-time special education or American Response to Intervention) by using a general term: “program.”**

When was the program established in your school or school district?

What is the nature of your role in this program?

What was your knowledge of the program prior to its existence at your school or school district?

If you know, what was the planning process for this program in your school or district prior to implementation?

Who was involved in the planning process?

Did your school or school district study or observe other schools or school districts with the program before beginning your own planning and implementation process on the same program?

What is the hardest part, in your opinion, of the implementation process?

Looking back, what would you have changed about the planning and implementation process?

As an educator or administrator, how were you prepared for participation in this program?

What are the challenges of the program in your school and as a whole?

What are the strengths or benefits of the program in your school and as a whole?

What could contribute to making this program more successful?

What is in the future for this program in your school or school district?

**Note: The following questions are applicable to either program of study (Finnish or American teacher education) by using a general term: “teacher education program.”**

What do you do in the teacher education program at your institution?

How has the teacher education program in your institution evolved over the past decade?

Has the curriculum structure for the teacher education program changed?

Did your school study or observe other schools’ teacher education programs before modifying your own?

What is the practicum structure for student teachers in your teacher education program?

What are the goals of your curriculum and practicum structure for pre-service student teachers in your program?

How have the admission criteria for your teacher education program evolved over the past decade?

Overall, how would you describe the relationship between the professor in the teacher education program and the candidate enrolled in your teacher education program?

Are professors in the teacher education program required or invited to conduct research on their own in the education field?

Is there an on-going dialogue between the professors and the teacher candidate regarding the professor’s research?

Are there opportunities for pre-service teacher candidates to conduct their own research in the education field?

What is the extent of professor involvement in pre-service teacher candidate research?



What are the challenges of the teacher education program in your institution and in the country as a whole?

What are the strengths or benefits of the teacher education program in your institution and in the country as a whole?

What could contribute to making the teacher education program more successful?

What is in the future for the teacher education program in your institution?

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**Note: The following questions will be asked of anyone with expertise in comparative education regardless of their country of origin.**

What is your background in comparative education?

On what countries have you done research?

Which countries are drawing the most attention to their education systems at the moment? Why? What aspects of their education system make them appealing?

What country would you compare your home country's education system to in order to raise the quality of your education system? Why?

What do you find are the challenges or drawbacks of comparative education?

What do you find to be the challenges or drawbacks of international student achievement tests?

What do you find to be the strengths or benefits of comparative education?

What do you find to be the strengths or benefits of international student achievement tests?

How do you see comparative education or international student achievement tests playing a role in the future of your country's education system?

## APPENDIX B

### INVITATION TO PARTICIPATE

Research Project Title: Comparative Education System Analysis Between Finland and the United States: A Case Study

You have been asked to participate in a research project conducted by Caroline Goodill from the University of Dayton, in the Department of Teacher Education.

The purpose of the project is to identify specific approaches for improving implementation efforts for specific programs in the American education system in order to provide every student with a quality education. This undergraduate honors thesis will highlight and evaluate programs in the United States that are or could be as successful as similar programs in Finland.

**You should read the information below, and ask questions about anything you do not understand, before deciding whether or not to participate.**

- Your participation in this research is voluntary. You have the right not to answer any question and to stop participating at any time for any reason. Answering the questions will take about 60 minutes.
- You will not be compensated for your participation.
- All of the information you tell us will be confidential.
- If this is a recorded interview, only the researcher and faculty advisor will have access to the recording and it will be kept in a secure place. If this is a written or online survey, only the researcher and faculty advisor will have access to your responses.
- I understand that I am ONLY eligible to participate if I am over the age of 18.
- If you are participating in an online survey: We will not collect identifying information, but we cannot guarantee the security of the computer you use or the security of data transfer between that computer and our data collection point. We urge you to consider this carefully when responding to these questions.

**Please contact the following investigators with any questions or concerns:**

Caroline Goodill, cgoodill1@udayton.edu, (440) 823-9811

Dr. Kathryn A. Kinnucan-Welsch, kkinnucanwelsch1@udayton.edu, (937) 229-3578

**If you feel you have been treated unfairly, or you have questions regarding your rights as a research participant, you may contact Mary Connolly, Ph.D., Chair of the Institutional Review Board at the University of Dayton, IRB@udayton.edu; Phone: (937) 229-3493.**