

**Is Coeducation An Untouchable Dogma?  
Breaking Grounds in the Introduction of Single-Sex Education  
in Gender-Neutral Finland**

Gajitos, Maria Asuncion

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<p><b>Author</b> Gajitos, Maria Asunción</p>	<p><b>Group</b> MUBBA 2006</p>
<p><b>The title of your thesis</b> Is Coeducation An Untouchable Dogma? Breaking Ground in the Introduction of Single-Sex Education in Gender-Neutral Finland</p>	<p><b>Number of pages and appendices</b> 60 + 24</p>
<p><b>Supervisor</b> Tuukainen, Tuuli</p>	
<p>Finland has enjoyed tremendous success in the three previous PISA assessment tests, causing a lot of attention worldwide and a flock of “education tourists” checking on the secrets of the Finnish educational system. However, PISA’s success has temporarily diverted awareness of other issues related to children’s well-being in schools, certain aspects of university teacher training, and the concept of educational equality.</p> <p>The Equality Law in Finland is like a watermark that shows itself in nearly any issue in Finland. In the field of education one of its manifestations is the absence of single-sex education as an option. Is coeducation a given that cannot even be questioned</p> <p>The OECD Report from autumn 2009 on gender-related issues based on previous PISA assessments, the TASUKO project sponsored by the Ministry of Education on gender sensitivity, and the numerous discussions by the public and in the media have corroborated the fact that there is indeed a need for some degree of reform in our educational system. The possibility of introducing single-sex education as an option in the future seems to be a welcome idea by the relevant parties.</p> <p>The purpose of the study is to find out what the current educational position in Finland is regarding single-sex education and what the future possibilities are.</p> <p>This research is qualitative, combining the case study method focusing on the <i>Olkahisen koulu</i> experiment as a unique phenomenon in Finnish elementary education history, and content analysis of the articles, which were published in major newspapers and professional journals. The theoretical part includes a general description of education, some legal foundations related to equality in education, and a brief historical background of single-sex education, both worldwide and in Finland. The influence of recent neurobiological research as a success factor in single-sex education abroad will be introduced in order to distinguish it from the feminist antithetical basis currently applied in Finland.</p> <p>The content analysis discloses issues related to the underachievement of boys and the increase in ADHD cases and the need for more male teachers, to name a few. The research confirms the need for reform in the educational system. One of the proposed solutions is to strengthen the gender-sensitive section in teacher training programs, with greater respect shown for the innate differences of students. This survey hopes to bring forth a fresh sense of innovation to the area of equality in education, and even more importantly, to the fruitful implementation of this educational option in the future.</p>	
<p><b>Key words</b> Single-sex education, brain research, gender-sensitive education, teachers’ training, Equality Law of Finland</p>	

Johdon assistenttityön ja kielten koulutusohjelma

<p><b>Tekijät</b> Gajitos, Maria Asunción</p>	<p><b>Ryhmä</b> MUBBA 2006</p>
<p><b>Opinnäytetyön nimi</b> Onko yhtenäiskoulu dogmi, johon ei saa puuttua? Tyttöjen ja poikien erillisopetus sukupuolineutraalissa Suomessa</p>	<p><b>Sivu- ja liitesivumäärä</b> 60 + 24</p>
<p><b>Ohjaajat</b> Tuukainen, Tuuli</p>	
<p>Suomen hienot tulokset kolmessa peräkkäisessä PISA- arviointitutkimuksessa ovat herättäneet maailmanlaajuista huomiota ja innostaneet ”koulutusturisteja” perehtymään suomalaisen koulujärjestelmän salaisuuksiin. PISA- menestys on kuitenkin hetkellisesti suunnannut huomion pois muista lasten kouluhyvinvointiin, yliopistolliseen opettajankoulutukseen ja koulutukselliseen tasa-arvoon liittyvistä kysymyksistä.</p> <p>Suomen tasa-arvo laki ohjaa monia ratkaisuja. Se näkyy myös koulujärjestelmässämme poika- ja tyttöryhmien puuttumisena. Onko yhtenäiskoulu normi, jota ei voida kyseenalaistaa? Onko se avain PISA-menestykseen?</p> <p>OECD:n syksyllä 2009 julkaisema PISA- arviointiin perustuva raportti sukupuolen merkityksestä, Opetusministeriön rahoittama sukupuolisensitiiviseen opetukseen liittyvä TASUKO- projekti sekä runsas julkinen keskustelu ovat vahvistaneet käsitystä siitä, että koulutusjärjestelmämme kaipaa ainakin jonkinasteista uudistamista. Tyttöjen ja poikien erillisopetus näyttää olevan yksi mahdollinen tulevaisuuden vaihtoehto.</p> <p>Opinnäytetyön tarkoitus on selvittää tyttöjen ja poikien erillisopetuksen asemaa Suomen nykyisessä koulujärjestelmässä sekä sen tulevaisuuden mahdollisuuksia.</p> <p>Kvalitatiivisessa tutkimuksessa yhdistyvät tapaustutkimus ja sisällönanalyysi. Tapaustutkimuksen kohteena on <i>Olkabisen koulun</i> erillisopetuskokeilu vuosina 2006–2007. Sitä koskevat sanomalehtien ja ammatillisten aikakausjulkaisujen artikkelit käsitellään sisällönanalyysin keinoin. Teoreettisessa osassa kuvataan yleisesti koulutusta, koulutuksellisen tasa-arvon lainsäädännöllisiä perusteita sekä tyttöjen ja poikien erillisopetuksen historiaa Suomessa ja kansainvälisesti. Lisäksi esitellään viimeaikaisen aivotutkimuksen tuloksia, joiden voidaan katsoa tukevan tyttöjen ja poikien erillisopetusta toisin kuin Suomessa esitetyt feministiset perustelut.</p> <p>Sisällönanalyysissa nousivat esille mm. poikien alisuoriutuminen, ADHD-diagnoosien lisääntyminen ja miesopettajien puute. Tutkimuksen perusteella koulujärjestelmä kaipaa uudistamista. Yksi ratkaisu voisi olla sukupuolisensitiivisyyden vahvistaminen opettajankoulutuksessa, jolloin oppilaiden synnynnäiset erot osattaisiin ottaa paremmin huomioon. Tämä selvitys tuo toivottavasti uusia näkökulmia koulutuksen tasa-arvo kysymyksiin sekä tyttöjen ja poikien erillisopetuksen soveltamiseen tulevaisuudessa.</p>	
<p><b>Asiasanat</b> Tyttöjen ja poikien erillisopetus, aivotutkimus, sukupuolisensitiivinen koulutus, opettajien koulutus, tasa-arvolaki</p>	

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# 1 Introduction

The subject of gender differences and its role in the education and development of children has long been of great interest to me because of my professional background as an educator of young children with an experience of more than 15 years of teaching in The English School-Helsinki.

In the summer of 2005 I came across a book on gender education based on neurological research findings. The discovery of inherent biological differences as a foundation for using educational methods according to whether the student is male or female drove me to read further on this topic. There was abundant material on the advantages and success of gender-oriented schooling or single-sex schools in other countries all over the world. This made me wonder if there is any room for applying this knowledge to the educational system in Finland, which enjoys already an uncontested reputation as the Best and Most Successful Educational System in the PISA arena. But is PISA the ultimate criteria?

A long-time observation on the fact that in Finland there are no single-sex schools reasserted itself. Why do they not exist as an option? Is coeducation a given that cannot be questioned? We seem to have the obstinacy to stick deep into the neutral-gender niche in the name of equality. Is there a misconception between equality and educational equity?

## 1.1 Study objectives

In carrying out this research project I was interested in discovering what the current educational position in Finland regarding single-sex education is and what the future possibilities are.

The article on the *Olkahisen koulu* experiment came by chance. Frankly, I have no recollection of how nor when I came across it. *Olkahisen koulu*-experiment was a unique educational initiative in 2006. The school principal's reasons for having a boys' and girls' grouping for about 70 % of school time was based on his reading of the academic results in Finnish language published by the National Board of Education Report in 2005. By carrying out this experiment he wanted to find out in the first place if such a grouping in the First Grade would help to improve the boys' academic performance. This was extremely interesting from many angles:

- This was an actual and unprecedented case in Finland.
- The experiment was carried out in a local, public school not in a private, international school.

- The initiator was a relatively young, male, Finnish principal.
- The experiment stirred a controversy. It became an instant “conversation piece” in the media and in the public sector.

I encountered an ample and extensive collection of articles on this exclusive experiment without any notion of the *Olkahisen koulu* experiment which made me even more curious to study the kinds of reactions that arose from the Finnish public and what leanings did those take.

During my last year of teaching, I conducted a similar experiment (without any previous knowledge of the *Olkahisen koulu* experiment then) dividing my Grade 3 Homeroom class into boys’ and girls’ groups. The grouping was to be temporary and limited to a few subjects. This personal initiative was well supported by everyone involved, including the parents and in particular, the pupils themselves. The experiment was carried out rather informally without any special documentation or time frame. Along the way there were constant and casual exchanges of comments and observations among the staff members, the pupils and the parents. At the end of the school year only one negative comment was gathered from a simple feedback sheet addressed to the parents; one mother warned that she did not want “any sexual discrimination in the teaching”. This was a meaningful experience for me. Living in neutral-gender Finland and receiving numerous positive feedback on a very brief gender-oriented experiment was very encouraging.

This single-sex grouping has been on the back burner for the past three years. I thought it high time to activate the discussion by doing this research work.

## **1.2 Research relevance**

There have been some research and gender education projects in Finland but these have focused mainly on the equality issue emphasizing, for example, how women are shortchanged by our educational system, on the salary scale, and in the career path. I think that the discussion can go deeper by approaching the real roots of the problem through a more correct information on single-sex education and even more, an open discussion of its possibility as an educational option here in Finland.

In doing this research I came upon a PISA Report (Fall 2009) on gender-related issues based on the past assessments. This material is of great significance in Finland because of the tremendous success our students have had in the three previous assessment tests. A PISA document on the topic can be a signal



that there must be a renewed interest in this area to merit the collaborative effort of PISA participating countries, experts from the PISA Consortium and the OECD, the Organization for Economic Cooperation and Development. The report's findings can provide additional information and perspective to this ever-recurring topic which often becomes a conservative's or progressive's "battlefield".

The Minister of Education also presided a discussion forum entitled "Boys and Girls in School" (*Tytöt ja pojat koulussa*) last Sept 2009 in order to deliberate on gender discrimination and segregation in schools, particularly in early education.

Recently a conference of experts concluded that schools were encouraged to pay greater attention to the developmental differences of boys and girls. Boys' brains develop more slowly, and the unrest brought on by adolescence begins later. (Parry 2010, 4.) This was part of the findings of the Consensus Development Conference held in February 2010 and convened by the Academy of Finland and the Finnish Medical Society Duodecim.

All the above events, the topics of discussions in the public and in the media, plus the PISA report 2009 corroborated my interest in the subject and my curiosity as to how this topic has been seen and contemplated upon in the Finnish society over the past years and in which direction the discussion is heading for.

*Olkahisen koulu* was an exceptional case in the educational system in Finland because by and large our educational institutions are coeducational by nature. This is the reason why the case study is intriguing and worth investigating. Questions flash through one's mind, such as what were the reasons for the experiment, how was it carried out and followed up, what consequences ensued from this attempt, and many more. After all, this attempt breaks the conformity and uniformity characteristic of our educational institutions for which we are extremely proud of.

### **1.3 Research methods and research questions**

The research is a qualitative one combining the case study method, that is *Olkahisen koulu*'s experiment as a unique phenomenon, and the content analysis method based on the collection of materials that have been published in major newspapers and in professional journals.

One challenging aspect of this research is that almost all materials are written in Finnish which is not my mother tongue. Although my reading comprehension is relatively good I had to ask some native speakers to evaluate my comprehension and translation of the texts.

As this experiment has ended there will be no personal site visits or interviews to be conducted. I suppose it would have been quite easy to get in touch with the incumbent principal who initiated the project for an interview. But on the other hand, I opted for not contacting him in order to be more objective in doing the research work and concentrate mainly on the printed articles. The research will not cover events such as the meeting organized by *Aamulehti* or the *TASA-ARVO* seminar where the principal had been a participant and had been asked about his views on the experiment. This report will neither include a discussion on the two televised interviews of the principal on *YLE TV* as well as the radio interviews in 2007. An obvious reason for this is because the events were held before this thesis plan was defined.

In the next chapter I will give a succinct description of education and the educators' role, public documents on education, followed by a definition of terms. Chapter Three will focus on the brief historical background of single-sex education worldwide, specifically in the United States and other English-speaking countries where the tradition has been longest and most researched. I will cite the general arguments for coeducation and the reasons for its popularity and also the reasons for the reversal of trends towards single-sex education. In Chapter Four I will describe the influence recent neurobiological research has in advocating single-sex education.

In Chapter Five we will look at the Finnish scenario: a brief history of education, the comprehensive schooling system, the PISA success and some gender research projects that have been carried out or are in progress.

The following chapter will concentrate on the case study: the principal's basis for the experiment and how it was carried out. Then, in Chapter Seven there will be a brief description of how the research materials were obtained and the selection process in preparation for the content analysis.

The second part of this research is the content analysis of the articles which were printed as a result of the experiment. The school became a byword at least in the locality and news articles appeared in *Aamulehti* and in the University of Tampere's web pages. The interest garnered nationwide attention when some articles were printed out in the national newspaper, *Helsingin Sanomat*, and in the professional journal, *Opettaja lehti*, among others.

For this research work the articles will be divided into

- 1 Materials *directly* related to *Olkahisen koulu* and the experiment
- 2 Materials related to the discussion of gender education in Finland

Then I will classify these articles according to the following research questions:

1. What the current educational position in Finland regarding single-sex education is.
2. What the future possibilities are.

The findings for Question 1 will be discussed in Chapter Eight. This will be followed by the enumeration and brief description of the findings for Question 2. Chapter Ten will be the concluding part and Chapter Eleven will present some personal insights and recommendations for future implementation.

I would like to emphasize that this is not an in-depth investigation but more of a survey of an occurrence and its consequences. Basically I wanted to find out what kinds of reactions and insights were reported and emphasized and whether there is a slight chance for a similar experiment to be implemented in the future.

Moreover this research work will focus primarily on studies and experiences related to elementary education. The reason for the keen interest in this area lies in the years I have dedicated to this educational level as my profession. This background and experience also shapes my opinion that if ever an experiment will be realized in the future, the most propitious choice would be to initiate it in this level.

Could new options in education be introduced in the Finnish educational system as we become more globalized and multicultural? Could single-sex education be more integrated into the teacher training programs so new teachers may lean on this scientific knowledge in their lesson preparation and in their interaction with the students? Could a more scientific approach to gender differences bring about increased equality? Or is single-sex education just a myth, a return to the Dark Ages and separatist?

## 2 Definition of Terms and Other Matters

In this section I will briefly expound on principal ideas related to education in general and single-sex education in particular. Furthermore I will also include excerpts from legal documents that have a bearing in the discussion of the topic. These materials give an insight into the importance of equality in Finnish society and in its educational system. The citations from the Basic Education Act and the Basic Curriculum Act are crucial for understanding the interpretation of educational equity, educational freedom and other education providers. Finally, as Finland is a member of the European Union, a section from the Charter of Fundamental Rights of the European Union has been added because this can serve as a juridical reference to the possibility of initiating educational institutions that favor and respect the constitutional right of parents and guardians to seek for and, whenever possible, establish such entities that respond to their philosophical and ideological convictions.

### 2.1 Etymological Roots of Education

The word education is rooted in the Latin verbs EDUCARE and EDUCERE. According to Casell's Latin Dictionary, the first one means "bring up, rear, educate" and the second one means "draw out, to lead out, raise up, and bring up". These verbs contain powerful meanings. Teaching is not solely an occupation characterized by knowledge-and-experience-transfer (instruction and training). An educator is more like an artist, one who discovers a potential, one who tries to elicit what is hidden, and one who sustains the growth of what has been drawn out from the person.

An educator's calling and ambition is to inspire and uphold the desire for learning. Computers and other technological advancements cannot educate in the real sense of the word. They can be sources of information. A teacher on the other hand is meant to draw out and nurture the potential in every child, guiding and enabling him to grow into an integral and responsible person.

For these reasons the teaching profession has been highly appreciated throughout all these years. It has been referred to as a professional vocation, a real way of serving humanity.

### 2.2 Education as a Fundamental Human Need

Education is a human need that is addressed in many different ways by the legal authorities depending on the political, socio-cultural and economic factors of a given country. Most economically advanced and stable countries have the possibility to offer high quality private as well as public education. Some

countries that struggle in their economies may have high quality education funded by private organizations and a scanty or inadequate education provided by the government, which has scarce resources. In welfare societies the right to have private education is an option but generally the public education available is highly commendable. Political ideologies may also influence the type of education promoted in a given geographical area.

Some countries have a relatively homogenous population which makes it easier for the level and content of educational systems to be equitable and monitored. A good number of highly populated countries in the world need to provide the basic needs considering a very myriad multicultural population coming from different creeds, races, economies, and so forth.

### **2.3 Education as a Constitutional Right**

Charter of Fundamental Rights of the European Union, Chapter 2, Article 14, Sections 1-3:

1. Everyone has the right to education and to have access to vocational and continuing training.
2. This right includes the possibility to receive free compulsory education.
3. The freedom to found educational establishments with due respect for democratic principles and the right of parents to ensure the education and teaching of their children in conformity with their religious, philosophical and pedagogical convictions shall be respected, in accordance with the national laws governing the exercise of such freedom and right.

The Constitution of Finland (731/1999, amendments up to 802 / 2007 included),  
Chapter 2, Section 16, Paragraphs 1-3:

Everyone has the right to basic education free of charge. Provisions on the duty to receive education are laid down by an Act.

The public authorities shall, as provided in more detail by an Act, guarantee for everyone equal opportunity to receive other educational services in accordance with their ability and special needs, as well as the opportunity to develop themselves without being prevented by economic hardship.

The freedom of science, the arts and higher education is guaranteed.

## 2.4 Other Legal Documents

Basic Education Act 628/1998 (Amendments up to 1136/2004), Chapter 1, Section 2, Paragraphs 1-3.

On the objectives of education:

1. The purpose of education referred to in this Act is to support pupils' growth into humanity and into ethically responsible membership of society and to provide them with knowledge and skills needed in life. Furthermore, the aim of pre-primary education, as part of early childhood education, is to improve children's capacity for learning.
2. Education shall promote civilization and equality in society and pupils' prerequisites for participating in education and otherwise developing themselves during their lives.
3. The aim of education shall further be to secure adequate equity in education throughout the country.

Basic Education Act 628/1998 (Amendments up to 1136/2004), Chapter 3, Section 7, Paragraphs 1.

On other education providers such as registered associations or foundations:

1. The government may authorize a registered association or a foundation to provide education referred to in this Act. Such an authorization shall be conditional on a specific educational or cultural need for the provision and on an agreement between the education provider and the local authority in whose area the education is provided. An authorization may be granted to provide education by the medium of a foreign language, special-needs education, education according to a particular ideology or education for students other than children of compulsory school age on the grounds of regional or national educational and cultural needs even though the education provider has not concluded an agreement referred to above. The authorization may also be granted for education provided abroad.

Principles of the National Core Curriculum for Basic Education, Chapter 2, Section 1, Paragraph 3:

Basic education helps to increase both regional equality and equality among individuals. In the instruction, the diversity of learners is taken into consideration, and gender equality is promoted by giving girls and boys the ability to act on the basis of equal rights and responsibilities in society, working life, and family life. ([www.oph.fi](http://www.oph.fi))

Principles of the National Core Curriculum for Basic Education, Chapter 3, Section 4, Paragraph 4:

The pupil's various learning styles and backgrounds, as well as the developmental differences between boys and girls, among individuals generally must receive consideration. In implementing instruction either in combined classes or in combination with a pre-primary group, attention must also be given to the objectives or distinctiveness of the different groups making up the class.

([www.oph.fi/english](http://www.oph.fi/english))

Act on Equality between Women and Men (609/1986; amendments up to 232/2005 included),

Section 1: Objectives:

The objectives of this Act are to prevent discrimination based on gender, to promote equality between women and men, and thus to improve the status of women, particularly in working life.

Act on Equality between Women and Men (609/1986; amendments up to 232/2005 included),

Section 5: Implementation of gender equality in education and training (206/1995):

Authorities, educational institutions and other bodies providing education and training shall ensure that women and men have equal opportunities for education, training and professional development, and that teaching, research and instructional material support attainment of the objectives of this Act.

## 2.5 Single-Sex Education and Coeducation

Single-sex education can be simply defined as education given to one sex group. On a practical basis this may be concretized into boys'-only and girls'-only schools or it may occur in a public school where subjects are taught separately to boys and girls. Single-sex schools may be private, public or church-affiliated or parochial. (Leinonen, 2005,12.)

In English, this type of education appears in many writings under these names: single-sex or same sex education, single-sex or same sex teaching, single-sex or same sex groups, single-sex or same sex classes, gender-segregated classes or single-gender classes and schools.

In Finnish the terms used are: *yhden sukupuolen opetus, tyttö- ja poikaryhmät, tyttö- ja poikaluokat*. The expressions, "differentiated teaching according to gender or segregated teaching" are less used. (Leinonen, 2005,12.)

The opposite type of education is called coeducational or mixed group and in Finnish it is *tyttöjen ja poikien yhteinen koulu/ryhmä* or *yhtenäiskoulu/-ryhmä* or often simply *sekarhythmä* (Leinonen, 2005, 12).

## 2.6 PISA Survey

The Program for International Student Assessment Test or more commonly known as the PISA Assessment is a three-year survey of the knowledge and skills of 15-year-olds in the major developed countries. PISA is co-ordinated by governments of participating countries, through the Organization for Economic Co-operation and Development (OECD). Finland's top performance for the first three assessments caused visitors to flock to our country to learn about the Finnish educational system.

In the article "The Finnish Success in PISA – And Some Reasons behind It", the Finnish comprehensive school system and pedagogical philosophy and practice were commended. An intrinsic part of this philosophy is the principle of equity, on which Finnish education policy has been largely premised. Efforts have accordingly been made to provide all population groups and regions of the country with equal educational opportunities. ([www.ktl.jyu.fi/ctl/PISA/english](http://www.ktl.jyu.fi/ctl/PISA/english).)

## 2.7 Other linguistic clarifications

Before moving on to Chapter Three, I would also like to clarify the notions of "sex" and "gender" by quoting a simple definition published by the National Academy Press in 2001:

SEX is a dichotomous biological variable. Humans are either female or male.

GENDER is a continuous variable. Gender is socially constructed. Humans can be mostly feminine, mostly masculine, or anything in between.

(Sax, 2006, 262.)

I will use "single-sex" to refer to the type of education that we will be discussing in this paper for more consistency in the use of terminology. Another reason for this is that using the word "single-sex" would emphasize the innate natural differences that are suggested in this study to be the structural foundations for new teaching methods.

In the First International Congress on Single-Sex Education held in Barcelona in 2007, Dr. Jutta Burgraff commented in the opening lecture: "Man and Woman: Nature or Nurture?" that most people prefer to speak of gender rather than sex. She accentuated the fact that:



it is not only a question of changing words. Behind this terminological modification lies the post-feminist ideology of *gender* which has been circulating since the decade of the 70s in the last century. According to this ideology, masculinity and femininity would not be fundamentally determined by biology, but rather by culture. While the term sex refers to nature and implies two possibilities (man and woman), the term gender comes from the field of linguistics allowing three variations: masculine, feminine and neuter. Consequently, the differences between a man and a woman would not correspond to a “given” nature, but would be mere cultural constructions “made” according to the roles and stereotypes which each society assigns to the sexes (“socially constructed roles”).

*No se trata sólo de un cambio de palabras. Detrás de esta modificación terminológica está la ideología posfeminista de gender que se divulga a partir de la década del sesenta del siglo pasado. Según esta ideología, la masculinidad y la feminidad no estarían determinadas fundamentalmente por la biología, sino más bien por la cultura. Mientras el término sexo hace referencia a la naturaleza e implica dos posibilidades (varón y mujer), el término género proviene del campo de la lingüística donde se aprecian tres variaciones: masculino, femenino y neutro. Por lo tanto, las diferencias entre el varón y la mujer no corresponderían a una naturaleza “dada”, sino que serían meras construcciones culturales “hechas” según los roles y estereotipos que en cada sociedad se asignan a los sexos (“roles socialmente construidos”).*

(EASSE, 2007, 22.)

Let me add a syntactic observation: in Finnish the order of the words that refers to the two sexes always begins with the female gender while in English it is the opposite. In this research I shall use the word order following the linguistic tradition proper to each language. Therefore the English translations and references will always begin with the male gender as is customary.

### 3 A Glance at the History of Single-Sex Education

Without going into much detail into the history of education worldwide, this synopsis will feature a few historical highlights in some English-speaking countries because these have had a long tradition of single-sex education and continue to do so in contemporary society. Of particular interest is the situation in US and UK because of their power of influence to set trends in the field of educational theories.

In the colonial history of Western European educational tradition, educational opportunities were limited by sex and by socioeconomic class. Both girls and boys attended the primary schools; Latin grammar schools and colleges were restricted to males. There were several reasons for such discriminatory practices.

1. The role of women was specifically defined as that of wife and mother. Since women in the colonial period did not have career choices, their schooling was limited to the basics (reading and writing) needed to carry out family and religious responsibilities.
2. There was a general prejudice, mainly held by males who controlled educational institutions, that women were incapable of higher studies.
3. The curriculum of the Latin grammar school and college stressed Latin and Greek classics, theology, and philosophy. These studies were designed to prepare future ministers and lawyers. During the eighteenth and nineteenth centuries, these professions were closed to women. (Murphy, 2000, 184-185.)

Thus schooling catered primarily to the male population due to the economic possibilities they could provide and the roles of the males in the traditional society. The socio-cultural infrastructure at that time did not demand nor expected that women perform other tasks than manage the family and the household, a well-appreciated and valued contribution to society then.

Before the time of urbanization the local village schools were the only possibilities for a more formal type of learning outside the homes. As the population was smaller then, each village provided a more general type of instruction for both sexes and for all ages. But as society and its economy developed the educational system also began to have some reformations. In some cases, a form of single-sex instruction was made available, in line with the moral code of those times. The school was an authority that signified uprightness, integrity of character, and discipline of mind.

With the advent of industry and with more political influence on education in a growing society, the boys were provided with more rigorous education as cited above. The girls were given a complementary type of education, often through institutions called the finishing schools where the fine arts, languages and other domestic skills were emphasized.

### 3.1 Rise and popularity of coeducational schools

In the 1960s and 1970s, in most Western countries, the civil rights and feminist movements began their crusade for equality of rights. This brought about radical consequences in culture and education, not to mention, in the family structures and in the mores as well.

During these two decades several public educational institutions with foundational histories dating back to 1838 in the US were transformed into coeducational schools. Even private schools which wanted to maintain their economic survival and prestige opened their doors to both sexes after 1970.

([www.educationnext.org/learning-separately](http://www.educationnext.org/learning-separately).)

A great part of this way of thinking was due to the feminism of the 70s, which fought against the stereotypes that appropriated to the sexes separate fields: “the private, the home and family life to the women; the public sphere of work, politics and intellectual life to the men”.

The feminists of this epoch believed firmly that in order to eradicate this myth, they needed to concentrate on what men and women have in common... In education, they fought so that the schools would be neutral with regards gender...in their didactic materials, criteria for selection, objectives, atmosphere and curriculum.”

*Gran parte de esta forma de pensar mana del feminismo de los setenta”, que combatía los estereotipos que adjudicaban a los sexos ámbitos separados: el privado, el hogar y la vida familiar, a las mujeres; el ámbito público, del trabajo, la política y la vida intelectual, a los hombres.*

*Las feministas de esa época creían firmemente que para extirpar esa mitología tenían que centrarse en lo que los hombres y mujeres tienen en común. (...) En la enseñanza, lucharon para que las escuelas fuesen neutrales en cuanto al género (...) en su material didáctico, criterios de admisión, objetivos, ambiente y plan de estudios”.*

(Aceprensa, 2008, 2.)

Equality was the magic word then that transformed the frog into a handsome prince. It was the ideal; the “dogma” in education was to teach girls and boys the same subjects in the same way at the same age.

Rosemary Salomone in her book, “Same, different, equal: Rethinking Single-Sex Schooling,” condenses the thought of the day: coeducational institutions were considered “more socially appropriate, liberating, and enlightened” ([www.educationnext.org/learning-separately](http://www.educationnext.org/learning-separately)).

In a way having a unisex culture could save the whole world from any more inequalities in the personal, professional and social-political life. After all we naturally associate with both sexes in our daily interaction. This normal socialization is just the right mix to develop the social skills of respect and tolerance needed in any society.

Coeducation would also avoid the recurrence of cultural gender roles and sexual stereotypes. If we treat every individual as such, then the greater-sex approach is non-existent. Not one gender will overpower the other. Consequently we can be assured of a promising democratic and progressive society.

Furthermore, mixed schooling is obviously much cheaper than single-sex schooling. In the present times when resources are rather scarce and the education budget is often one of the first ones to suffer the cuts, coed is simply a convenient solution. But is it so in the long run?

### **3.2 Reversal of trends**

About three decades after the powerful Women’s Liberation, a wave of pessimism began to seep expressing discontent over the educational system and its academic and social results. For example,

The American Association of University Women (AAUW) published a series of studies in the 1990s called “Shortchanging Girls, Shortchanging America”, which highlighted the fact that girls aged 9 to 15 suffered from lower self-esteem, less willingness to stand up for their views with teachers, and lower interest in science and mathematics than boys. The AAUW report sparked an intense national debate, with its findings that girls were disadvantaged in classrooms by, among many inequities, being called upon less frequently and encouraged less than male students. ([www.educationnext.org/learning-separately](http://www.educationnext.org/learning-separately).)

Through this the coeducational education that was supposed to be the panacea for gender equality began to lose its charm. Some of the diehard feminists moved to the other camp and started proposing single-sex education to empower the females again.

But by the turn of the century, a “boys’ crisis” was declared. They were not enjoying good academic standing; they were being diagnosed with attention deficit disorders and prescribed medication (some at a relatively young age), and have lower educational and occupational expectations.

In the UK

The Financial Times publishes a report of the top schools with excellent academic results in Britain annually. In the past the top 25 were all single-sex schools. In the 2009 Official School League Tables of the 25 schools ranked as the best, 20 were single-sex schools and five were mixed schools ([www.timesonline.co.uk](http://www.timesonline.co.uk)).

There is a very long history as well in the United Kingdom of single-sex education. One of the more potent associations for British girls’ schools is the Girls’ School Association (GSA) that has part of its history dating back to 1874.

GSA’s grounds for single-sex schools and in particular girls’ schools are the following, as cited in Leinonen’s research:

- Single-sex schools demonstrate excellent test results
- Boys and girls develop at different paces
- In girls’ schools, girls can develop at their own pace
- Single-sex schools recognize the differences in boys and girls, among them in learning and studying
- Girls’ schools support the girls and their ambitions professionally or personally, some of them become future leaders
- Girls’ schools can bolster up the girls’ leadership, self-confidence, independence and achievements
- Girls’ schools offer a safe environment for taking risks
- Girls’ schools offer the girls a frame of reference by which the girls can evaluate critically the mass media’s projected ideas of boys and girls
- Girls’ schools develop the girl’s attitude towards natural sciences, mathematics and in non-traditional choices
- In girls’ schools there are learning strategies that are geared to girls and the teaching staff are experts in this
- In girls’ schools gender stereotyping is avoided
- In single-sex schools students can study without social distractions (Leinonen 2005, 26-27.)

From this enumeration of the advantages of single-sex education proven over time, one can deduce that such a teaching environment does not only encourage more serious academic performance, they also contribute to character development. Far from a return to traditional roles, single-sex education empowers its students to face the challenges of our constantly changing and fast-paced world.

## 4 Contemporary Findings based on Developmental Brain Research

The current hype on single-sex education, especially in North America, has been powerfully promoted and evangelized by Dr. Leonard Sax and Michael Gurian. Both have written books on the topic and lectured on countless occasions on the web, on television and in academic and public halls. They have based their strong convictions on recent neurobiological research, quoting findings from some of the experiments conducted on newly-born babies, among others. These observations underline the fact that there are innate differences between boys and girls that need to be taken into consideration in their development and education.

These proponents of single-sex education do not claim that this type of education is the cure-all to all educational problems, nor do they insist on it to be compulsory. There is still a lot of room for following up this phenomenon on a longer time frame. Nevertheless, the available materials stress the fact that single-sex education has contributed to betterment – to a greater or smaller degree – of academic success.

The ideas in this chapter will highlight three of the biological differences that Dr. Sax expounds on in his book, “Why Gender Matters”. They are the studies on the human brain, the senses of sight and hearing and the influence of the hormones.

Recent brain research suggests that there are two principal physical differences between male and female brains and also in the way men and women use their brains.

First, the **corpus callosum**, which links the left and right hemispheres of the brain, is relatively larger in women than in men. Second, the left side of the cortex grows more slowly in boys than in girls. This may explain why boys tend to develop formal language and communication skills later than girls and find it less easy to work collaboratively.

Imaging studies show that men and women tend to use their brains differently. When performing complex tasks, females have a tendency to bring both sides of their brain to bear on the problem, whereas males use only the side most obviously suited for the task. ([www.ltscotland.org.uk](http://www.ltscotland.org.uk).)

Perhaps the neglect or depreciation of this fact was due to the reason that for years a misinterpretation that brain size was tantamount to intelligence was the prevalent concept. This theory by a German physician, Paul Julius Möbius, taught that women are “psychologically weak-minded”. Möbius assumed that intellect was a simple function of brain size: the bigger the brain, the greater the intellect. (Sax, 2006, 31.)

This misconception was definitely debasing but luckily with modern research findings, this has been disproven. There are female and male brain differences which do not have a direct link with intelligence quotient, rather they are simply different, without one being better or worse than the other.

Dr. Sax cites this experiment in Chapter Two of his book to underline the fact of the difference in female and brain structure:

In 2004, an all-star team of fourteen neuroscientists from the University of California, the University of Michigan, and Stanford University published their findings demonstrating a dramatically different expression of proteins derived from the X chromosome and the Y chromosome in human female and male brains. In men many areas of the brain are rich in proteins that are coded directly by the Y chromosome. Those proteins are absent in women’s brain tissue. Conversely, women’s brain tissue is rich in material coded by the X chromosome; these particular transcripts of the X chromosome are absent from men’s brain tissue. These sex differences, then, are *genetically programmed*, not mediated by hormonal differences. (Sax, 2006, 14-15)

**Table 16. Summary of Differences between P Cells and M Cells (Sax, 2006, 22)**

	<b>P CELLS</b>	<b>M CELLS</b>
<b>Are wired predominantly to...</b>	Cones	Rods
<b>Are located mostly in...</b>	The center of the retina(center of the field of vision)	All throughout the retina (entire field of vision, peripheral and central)
<b>Are best adapted to detect...</b>	Color and texture	Location, direction and speed
<b>Answer the question:</b>	“What is it?”	“Where is it now? Where is it going? How fast is it moving?”
<b>Ultimately project to:</b>	Inferior temporal cortex	Posterior parietal cortex
<b>Predominate in:</b>	<b>FEMALES</b> (More P cells than M cells)	<b>MALES</b> (More M cells than P cells)



When an educator considers these biological differences in the education of young children he or she will realize why girls draw “nouns” (concrete and typical objects, such as the family members, the flower, the sun or the house) while boys draw “verbs” (typical scenes of race cars, airplanes, sky rockets in motion). The cones in the retina are more sensitive to color than rods, which is a reason why girls have the facility and tendency to use as many crayons for their works of art while boys prefer solid colors of black, silver and gray. A teacher, normally female, who evaluates a boy’s painting, may sometimes criticize the lack of observation of details and artistry in the piece of his art work without any intended depreciation of the pupil. The girls, on the other hand, are oftentimes praised because they “fulfill” the aesthetic requirements of the teacher.

Researchers have also been keen on observing the reactions of newborn babies to stimuli, concretely, moving objects and music. Again the differences in the reactions of baby boys from baby girls are due to the anatomical structure of the eye and the degree of the sensitivity of the sense of hearing.

On hearing:

Professor Jane Cassidy at Louisiana State University after studying 350 newborn baby girls and boys found that girls’ hearing was substantially more sensitive than the boys’, especially in the 1,000 – 4,000 Hz range, which is so important for speech discrimination (Sax, 2006, 17).

On vision:

The retina is the part of the eye that converts light into a neurological signal. The retina is divided into layers. One layer contains the photoreceptors, the rods and the cones. Rods are sensitive to black and white. Rods are color-blind. Cones are sensitive to color. (Sax, 2006, 19).

Furthermore... the male retina is substantially thicker than the female retina. That’s because the male retina has mostly the larger, thicker M cells while the female retina has predominantly the smaller, thinner P ganglion cells. (Sax, 2006, 21).

Without going into more scientific facts, I cited these brief findings because these will have implications in the discussion of how boys and girls learn. By knowing more and understanding these innate differences an educator can wisely use this information in her teaching methods without falling into gender-stereotyping.

Dr. Sax enumerates other biological developmental differences in his book that influence the way of learning of a person. These characteristics are more noticeable in infancy and adolescence than in adulthood, when the brain development has been completed. This is also one of the reasons why, if

such projects will be carried out in the future in Finland, the ideal level would be at the early education and primary education stage.

Below is a more detailed summary of the points mentioned in this book to cite the natural differences of the sexes:

**Table 17. Some Female and Male Differences cited in “Why Gender Matters” (Sax 2006)**

	<b>FEMALES</b>	<b>MALES</b>
<b>Chromosome</b>	Chromosome X (vital for language learning and fine motor skills)	Chromosome Y
<b>Hormones</b>	<i>acetylcholine</i> : (for learning and memory; visual stimulation and longer attention span)  <i>oxytocin</i> : (plays a major role in establishing maternal behavior)	<i>adrenaliine</i> : the “fight-or-flight” hormone that triggers excitement in stressful situations  <i>testosterone</i> : (On average, an adult human male body produces about 40 to 60 times more testosterone than an adult human female body, but females are, from a behavioral perspective more sensitive to the hormone.)
<b>Retina</b>	P -Cell (color and texture); Girls are responsive to warmer colors such as red, pink and brown	M -Cell (movement, space); Boys are more responsive to cooler colors such as blue, silver and black.
<b>Reaction to and Experience of Stress</b>	Inhibits learning; females often avoid risk-taking.  (Females exhibit physical <i>sensations</i> like a faster heart rate, sweating, increased breathing; and <i>behaviors</i> , like trying to escape the situation)	Facilitates learning.  (“Blood floods their muscles and circular systems so they actually think better under stress”)

## 5 A Brief History of Single-Sex Education in Finland

According to Leinonen's report *Single-Sex Education Today* ("*Erillisopetus tänään*"), there was a long history of single-sex education for the upper class families in Finland.

In the beginning the elite boys studied in schools run by the church where they were prepared for various official duties, the girls were educated at home or in private girls' schools. In 1843 the governing of the schools was transferred to the state and during this same year the first public girls' school was ratified. These were established in Helsinki and Turku and they were considered the first public girls' schools in the northern countries.

(Leinonen, 2005, 15.)

The Finnish elementary education was founded officially in 1866 even though the nation was taught at home and in the village schools to read, to write and learn about religion even before this foundation. The elementary school composed of the lower and upper –level of education were joined together in 1958. (Leinonen, 2005, 13.)

The first coed schools were created in the 1880s and at the turn of the century the number of these schools had increased in number that, by the 1970s the last boys' and girls' lyceums were closed down. The idea of coeducation for all citizens is a common and homogenous school independent of one's social class or geographical area. The growth and teaching objective of basic education has been from the beginning the individual's condition and teaching according to the age level, regardless of sex. (Leinonen, 2005, 16.)

Finland enjoys a very strong tradition of coeducational education as laid down by its laws mentioned in Chapter Two. The educational system has been quite homogenized and the results have been rather stable and satisfactory.

### 5.1 PISA and Finland or Finland in PISA

The unprecedented success of the Finnish students for the past three consecutive studies in the PISA assessment tests defined in Chapter Two has attracted huge crowds of official visitors touring our schools nationwide just to see for themselves this success phenomenon. In the website of the Ministry

of Education there is a page dedicated to this topic which is also a recommendable source of information.

Accordingly, one of the guarantees of success given by educational experts and analysts is the Finnish comprehensive school system which offers equal educational opportunities to everyone irrespective of domicile, gender, financial situation or linguistic and cultural background. With this objective in mind, accessibility of education is ensured throughout the country. Finland does not have segregated educational services for different genders. ([www.oph.fi](http://www.oph.fi).)

Interestingly enough, on the University of Jyväskylä website, a fascinating insight on PISA success in line with gender differences gives us some food for thought:

On the other hand, Finland has been less successful in ensuring gender equality, particularly as concerns *reading literacy*.

As shown by PISA 2000 results, girls outperformed boys in reading literacy in all the participating countries. In Finland, however, the gender gap was widest and proved significant on all three subscales of reading literacy. In 2003 the gender gap in reading literacy has narrowed slightly still being 4<sup>th</sup> widest in Finland. The gap, nevertheless, is not due to Finnish boys doing poorly but rather to Finnish girls performing exceptionally well. After all, Finnish boys scored better than boys in any other OECD country, except for the Korean boys, and even better than girls in many of the participating countries. The gender differences notwithstanding, the Finnish PISA team is confident that the gap can be reduced without lowering the average level of performance, especially by fostering boys' interest and engagement in reading both at and outside school.

In *mathematical literacy*, on average across countries, gender differences were considerably smaller than in reading literacy. In Finland, practically no differences were found between boys and girls in this domain in 2000 data (the difference in mean performance being 1 point in favour of boys).

In 2003 data, the gender difference was slightly wider (7 points in favour of boys) and statistically significant. Still the difference was smaller in Finland than in OECD countries on average.

In *scientific literacy*, Finland displayed statistically significant gender difference of 6 points in favour of girls.

(<http://ktl.jyu.fi/ktl/PISA/english>.)

## 5.2 Gender-oriented research projects

As mentioned in the Introduction I will cite a few initiatives that have been carried out in the past so that women may obtain and maintain an equal position in society. Most of these projects were conducted in the vocational and university level, a few in the secondary level.

Oulu University's Kajaani University Consortium's has made projects related to equality since the 1980s in the education, training and teaching sectors as well as the career sectors. One of them is Women IT – Women in Industry and Technology (2001-2006), which has been one of the largest equality projects in Finland. The University of Technology with funding from the European Social Fund carried out two projects in 2001-2005: TiNA- Project, Information industry training and equality - women as a different resource and Women in Information Industry. (Leinonen, 2005, 17-18).

Settlement Association Neighbors carried out projects in 2000-2003. The same association founded Tampere's Girls' House with the aid of Finland's Slot Machine Association. (Leinonen, 2005, 19.)

Although most of the projects were designated to boost the girls' performance, there were different projects for boys which have also been carried out in Finland, with activities directed only to boys, some in the early training and in the teaching sectors. For example, some journalists from different fields of art implemented, together with the Whippersnappers-in-orbit, a project for boys in 2003-2004 with the objective of getting them interested in art studies, where there are few boys. Settlement Youth Association completed a Meikäpoika project in 2001-2003 with the aim of creating new models of jobs for boys that would correspond to the challenges they face in growing up. (Leinonen, 2005, 20-21.)

In 2006 *Tasa-arvoasiain neuvottelukunta* (TANE) awarded the *Miehen työ*- recognition to Aaro Heikkinen, the first one to receive this award from the field of education. It is a simple acknowledgment of what a public school teacher in Teppanan School in Kajaani has been practicing in his chosen field. According to the jury Aaro Heikkinen is an example of a teacher who in his own work in the elementary level carries out his work with passion, conscious of the implication of sex differences in his own teaching. He has also encouraged other male teachers to collaborate in projects related to equality. (Sandström 2006). Among his initiatives were organizing a girls' technology club in his school and other projects regarding equality since 1980 (Moliis, 2006, 20-21).

## 6 Case study: *Olkahisen koulu 2006-2007*

According to Leedy and Ormrod (2001, 149) in a case study researchers focus on a single case, perhaps because its unique or exceptional qualities can promote understanding or inform practice for similar situations. Moreover they state that a case study may be especially suitable for learning more about a little known or poorly understood situation. It may also be useful for investigating how an individual or program changes over time, perhaps as the result of certain circumstances or interventions. In either event, it is useful for generating or providing preliminary support for hypotheses.

The case study for this research is an educational experiment carried out in the school year 2006-2007 in *Olkahisen koulu* which is located in the north eastern part of Tampere, between Linnainamaa and Kämmenniemi areas. *Olkahisen koulu* (Jenseninkatu 3, 33610 Tampere) is composed of a public grade school with classes from Grades 1-6 and a day care center beside the school. At present it is run by Marja Riekkola and it is a coeducational institution.

Pasi Rangell was the school principal back then who introduced a boys' and girls' grouping for the incoming first-graders with the approval of the pupils' parents and the collaboration of the teaching staff.

This was the first elementary school in Finland to have done such an experiment after the abolishment of gender-oriented schools back in the 70s. Obviously it received a lot of attention. Since single-sex education is not a common phenomena in Finland this experiment could serve as a stepping stone for gauging what is known about this type of education, what impressions it caused, what emotions it provoked and what new ideas did it project.

Principal Rangell explains his rationale and procedure detailedly in an article published in *EriKa* 1/2007 (Jyväskylä University publication) and in two power point presentations found on the internet. The copies of these are provided in the Appendix section.

In his power point presentation of 2006, "Do you, boys and girls, need different stimuli in order to learn better? Boys and girls in separate classes in early education." (*"Kaipaavatko tytöt ja pojat eriläisiä virikkeitä oppiakseen paremmin? Tytöt ja pojat eri luokille alkuopetuksessa"*) Principal Rangell recalls what triggered him to dare to change the grouping of the incoming first graders in his school. The main reason for the principal's decision was his concern for the poor performance of the boys in the Finnish language studies as compared to girls according to the National Board of Education Report of 2005.

A secondary reason for the experiment was how to develop the girls' self-confidence. By being in an all girls' grouping, he informs, the girls may become more daring and expressive.

He thought that the learning results can be influenced considerably depending on what stimulation is offered to the pupils. He affirms that they learn if the subject matter is interesting or is presented to them in an interesting way.

## **6.1 Organizing the school year 2006-2007**

In a case study the researcher collects extensive data on the individual(s), program (s), or event(s) on which the investigation is focused. These data often include observations, interviews, documents (e.g., newspaper articles), past records (e.g., previous test scores), and audiovisual materials (e.g., photographs, videotapes, audiotapes). (Leedy & Ormrod, 2001, 149.)

How was the experiment carried out? During the Spring Term 2005, the parents of the incoming first graders were called to an informative meeting where the objectives and the particulars of the experiment were disclosed. The parents gave the green light signal on this occasion. The parents were notified that they would be asked for their comments four times during the school year. If at any point opposition or resistance would be received, the whole project would be discontinued and a mixed classroom setting would take place.

That school year the incoming first graders (36 pupils) were in boys' and girls' grouping for 70 % of the lessons namely, Finnish language (seven hours), Math (four hours), Physical Education (one hour), Art (one hour) and Music (one hour). They were together in Handwork (two hours), Environmental Studies (two hours), Religion (one hour), and Physical Education (one hour) and during lunch. The teaching materials (such as pictures, stories and activities) as well as the teaching methods used were selected according to the natural interests of boys and girls. In the boys' classes the lesson involved hands-on activities and/or movement, while the in the girls' classes there were more activities geared towards developing self-expression, such as making plays. (Holopainen, 2006.)

The project was meant to be temporary or more precisely, meant only for the first elementary grades. They were to be in mixed grouping starting the second grade or at the latest in the third grade.

## 6.2 The Equality Controversy

By identifying the context of the case, the researcher helps others who read the case study draw conclusions about the extent to which its findings might be generalizable to other situations (Leedy & Ormrod, 2001, 150).

The most blatant insult hurled at the *Olkahisen koulu* experiment was in the name of equality. The fact of making distinctions and separation was immediately tagged as something unconstitutional and more so intolerable in our society where a lot has been achieved in order to eradicate groupings or classes that even give a slight hint of disparity.

In the slides 12–14 of the 2007 power point presentation, “Together or Separate – From Different Classes on the Same Line. Boys’ and Girls’ Teaching in Separate Groups” (“*Yhdessä ja erikseen – eri luokilta samalla viivalla. Tyttöjen ja poikien opetus erillisissä ryhmissä*”), the principal addresses the current controversy regarding equality by posing these questions: Is it equality

- to demand the same learning styles from the boys and the girls?
- to allow the boys to receive 80 % of the teacher’s attention?
- that 70 % of the pupils in special education classes are boys?

He concludes that for him equality is achieved when the boys reach equally good results as the girls. He moves on to emphasize that they do not want to promote stereotypes through this experiment: Boys are not encouraged to be Tarzans or “machos” nor are the girls stimulated to become Barbies and princesses. Rather they aspire to give personal space within the groups so the pupils develop themselves into respectable learners. (Rangell, 2007, slides 12-14.)

## 6.3 Evaluation and Results

Principal Rangell spelled out the importance of receiving feedback and evaluation on the project. The parents’ opinions were foremost together with the teachers’ evaluations. Moreover they will be counting on the feedback of “outsiders” such as an Academic Researcher and three university students, who would be writing their theses on this case study. Publicity without doubt would also play a role in measuring the success of the project.



From the first feedback received from the parents there was only one family (out of 36 families) who wanted to stop the experiment immediately and return to the traditional mixed group setting. Four families were skeptical about the whole project while the rest gave their full support to the initiative.

After the beginning of the spring term a questionnaire was sent again to the parents. There was a noticeable increase in the support for the project. Only one questionnaire was returned empty. But all in all, full support was 97 %.

For the university research work, a control group was to be observed as well as the first graders of *Olkahisen koulu*. The control group was composed of 120 first graders from the other local schools in the vicinity. Both groups will be monitored and tested according to their performance in Math and in Finnish, as well as their motivation and their impressions regarding their own learning.

The results of that school year's observations were:

1. The skills of both groups were on the same level.
2. *Olkahisen koulu* pupils were more interested in math than the control group.
3. Environmental Studies was not an interesting subject for the pupils of *Olkahisen koulu* as compared to the pupils of the other local schools.
4. The interest in the Finnish language classes was the same for both groups. But in all schools the girls tend to be more interested.
5. The boys of *Olkahisen koulu* were more eager to take challenges than the control group.
6. The boys of *Olkahisen koulu* experienced more support than the control group.
7. As compared to the girls of *Olkahisen koulu*, the boys were persistent and persevering in the experiment until the end. No difference along this line in the control group. (Rangell, 2007, slides 17-19).

According to the researchers the differences will show more in the next grade levels.

#### **6.4 Principal Rangell's Conclusions**

Principal Rangell received severe criticism on his project. It had been labeled "die hard, conservative" and the proponent of "gender apartheid". These will be cited more in depth in the discussion of the articles that did not favor the initiative. On page three of the article in *EriKa* he explains the difference between what the critics raved at him and what his intention was:

Our plan is not to return to the old separation of the sexes in the schools. Our goals and starting points are very different from the boys' and girls' school back then.

*(Toiminnassamme ei ole kysy paluusta vanhoihin sukupuolijaon mukaisiin kouluihin. Toiminnan tavoitteet ja lähtökohdat ovat hyvin toisenlaiset kuin aikoinaan tyttö- ja poikakouluajattelussa.)*

At the end of his article, Principal Rangell declared that he was quite satisfied with the fact that the project aroused a lot of curiosity and interest. In his own words, he says that

It is time to begin to discuss seriously why boys clearly trail behind the girls in learning results, or do the girls miss the developing of self-esteem and self-assurance. Also it is once in a while stimulating to speak seriously about the content of the teaching instead of money or the scarcity of it. The Finnish comprehensive school is good but it is not yet ready.

*(On aika riveta keskustelemaan vakavasti, miksi järjestelmässämme pojat jäävät oppimistuloksissa selvästi hopealle tyttöihin nähden tai kaipaavatko tytöt itsetunnon ja rohkeuden kehittymistä. On myös virkistävää puhua välillä vakavasti opetuksen sisällöstä rahan tai sen riittämättömyyden sijaan. Suomalainen peruskoulu on hyvä, mutta ei vielä valmis.) (Rangell, 2007, 10).*

Although no claims for success can be made, Principal Rangell concludes that in his opinion this type of grouping works best in early education, without the intention of extending it.

## 7 Data Acquisition

Simply defined data acquisition is the systematic, objective analysis of message characteristics. Although content analysis must conform to the rules of good science, each researcher makes decisions as to the scope and complexity of the content-analytic study. (Neuendorf, 2002, 1-2)

Further on the same author states that content analysis summarizes rather than reports all details concerning a message set. This is consistent with the nomothetic approach to scientific investigations (i.e., seeking to generate generalizable conclusions), rather than the idiographic approach (i.e., focusing on a full and precise conclusion about a particular case. (Neuendorf, 2002, 15)

The school year 2006-2007 was an eventful year for Principal Rangell. His initiative received a lot of attention from the public sector and the media so that numerous articles and media productions ensued not to mention invitations to seminars. Among the events where his participation was considerable were:

*Opettaja.tv* productions by YLE (Finnish Broadcasting Company):

Studio: Girls' and Boys' Education. Guests: Psychology Professor Liisa Keltikangas-Järvinen and Principal Pasi Rangell. First transmission: 17.10.2007. Duration: 16:23 minutes.

Studio: Boys and Girls. Moderator: Arno Kotro. Guests: Professor of Education Elina Lahelma. (University of Helsinki) and Principal Pasi Rangell. First transmission: 25.11.2008. Duration: 20:00 minutes.

Radio interviews:

First transmission: 24.5.2007. *Helsingin Sanomat*. YLE Radio and TV Commentary.

Guests: Researcher Tarja Palmu (University of Helsinki), Principal Pasi Rangell and Olli Varjonen, former student of a Boys' School. Duration: 45.00 minutes.

Second transmission: 24.8.2007. *Radio Peili*. Guests: Researcher Tarja Palmu (University of Helsinki), Principal Pasi Rangell and Olli Varjonen, former student of a Boys' School. Duration: 45.00 minutes..

The television interviews are still available for viewing via the internet. I highly recommend the readers to watch them and listen to the arguments that came up in the discussion. The ideas from these broadcasts will be incorporated in the discussion of the topic but they will not be considered as the main

source for this research paper due to the abundance of written articles that have been collected from the archives. The addresses of the above-mentioned TV productions will be included in the Appendix.

In the following chapter we will go through the articles that have been selected which touched directly on the subject and other articles related to the secondary themes that arose when discussing single-sex education. In this paper I use the term “articles” to refer to any of the written material or texts published on the net or in the newspapers and magazines under the headings of Editorial, City News, Opinion, Text Messages, Letter to the Editor, Life and Health Section, Science and Nature Section, Feature Articles, and even Announcements Sections of the publication.

The main sources of the data for the study were the archives of *Helsingin Sanomat*, *Aamulehti* and *Opettaja*.

*Helsingin Sanomat* is the largest subscription based newspaper in the Nordic region. The paper's weekday and Saturday circulation totaled in 2008 412,421 copies, and its Sunday circulation 468,505 copies. (www.hs.fi.)

*Aamulehti* has the second largest circulation of Finnish dailies with an average circulation of 135 293 per day and 139 516 on Sundays according to the 2009 figures. Readership is 310 000. (www.aamulehti.fi). This was also chosen because it was the most important newspaper of the region where the project took place. It is but logical that the local media would be very much involved in following up this experiment.

*Opettaja –lehti* is the official publication of the Trade Union of Education. This is the staple reading material for those involved in education. It is the oldest weekly periodical in Finland, with 40 separate issues/year and special editions and other supplements. The official circulation is 96 771 as of 18.1.2010. (www.oaj.fi.)

There were also four articles on the project from the University of Tampere's net publication, UTAIN, published on the same date.

Just from the figures of readership mentioned above one can deduce that any written material on print and on the net receive considerable attention and provides a possibility for feedback, not to mention the power to influence public opinion.

## 7.1 Searching the archives

Recovering articles from *Opettaja –lehti* was rather easy as the office is located right across the university premises. Moreover, the secretary was very helpful and interested as well in the topic. She handed me the bound collection of the magazines from 2006-2009 so I could flip through and look for the relevant articles. She also copied the articles for me and gave me extra copies from the 2009 collection. I was rather surprised that I did not encounter as many articles as I imagined there would be regarding this experiment. The only direct reference to *Olkahisen koulu* was the editorial from 2006.

The other articles were mostly on the discussion of equality education, its past and future projects.

*Helsingin Sanomat's* archive was user-friendly. I could easily check from their Search section if there were articles that were related to the key words I wrote on the Search Box. From my initial visit to the site I was able to list about 23 titles that were related to my research topic. The second step was to buy the reader's right to read the selected articles. For viewing 25 articles one had to pay 10 Euros. When I gained access to the archives, there were more articles to be checked than earlier estimated.

Access to *Aamulehti's* archive was a bit more problematical but the customer service was good. The contact person was very helpful and quick in giving advice to resolve some technical problems I encountered. In order to even have a preliminary search one had to pay a non-subscriber's fee of 17 Euros for the right of use for a week.

## 7.2 Selection of the Materials for the Analysis

After going through these technical hurdles the following number of articles was obtained:

**Table 18. Materials directly related to *Olkahisen koulu* and the experiment**

Publication	Number of articles: 2006	Number of articles: 2007
<i>Helsingin Sanomat's</i> archive	4	0
<i>Aamulehti's</i> archive	15	4
UTAIN archive	4	0
<i>Opettaja</i> archive	1	0

**Total number of articles: 28**

**Table 19. Materials on Gender Education and Related Issues in Finland**

Publication	2006 articles:	2007 articles:	2008 articles:	2009 articles:
<i>Helsingin Sanomat</i>	7	15	10	8
<i>Aamulehti</i>	3	1	0	1
<i>Opettaja</i>	3	3	1	2

**Total number of articles: 54**

The key words used to find related topics to single-sex education in the above archives were:

Boys and girls in school	<i>(tytöt ja pojat koulussa)</i>
Equality in school	<i>(koulun tasa-arvo)</i>
Boy and girl class	<i>(tyttö ja poika luokka)</i>

Summing up there were 82 articles to be used in the analysis. However, after a quick second reading, 10 articles were classified as “Rejects” because of the following reasons:

1. A *Helsingin Sanomat* editorial focused on the teen agers’ social habits.
2. One feature article under the Life and Health section described a typical first day of school experience.
3. Three articles focused on teasing.
4. One letter under the Opinion section dealt with Woodwork classes; an article in *Opettaja lehti* in 2006 focused on a girls’ project in the high school level.
5. One article in *Opettaja lehti* was concerned about the students in the vocational schools.
6. One commentary in *Opettaja lehti* described The National Council of Women in Finland achievements in women’s rights and the right to education for all.
7. An *Aamulehti* article criticized the matriculation examinations.

## 8 Content Analysis: what the articles said about the case study

The articles which referred directly to *Olkahisen koulu* were further divided into three categories.

Category A Articles that reported on the project in an objective way, in a more neutral tone, concentrating on facts rather than opinions. (Twelve articles)

Category B Articles that clearly favored the initiative. (Twelve articles)

Category C Articles that were skeptical in tone and evidently against the plan. (Four articles)

### 8.1 Reporting on the *Olkahisen koulu* initiative

The description of the articles in all the categories will be done in chronological order, citing the date of the publication, the title of the article and the source. This procedure will help to follow the development of the case study as referred to in the publications throughout the school year and beyond.

**Table 20. Factual Articles on *Olkahisen koulu***

Date	Publication	Title	Author
16.9.2006	Aamulehti	<i>"Olkahisissa on tyttöluokka ja poikaluokka"</i>	Piia Rantio
5.10.2006	Aamulehti	<i>"Tervetuloa keskustelemaan poikien ja tyttöjen koulusta"</i>	Aamulehti
6.10.2006	Aamulehti	<i>"Yli puolet kannatti kouluhin erillisiä tyttö- ja poikaluokkia"</i>	Jenni Mäenpää
8.10.2006	Helsingin Sanomat	<i>"Tytöt ja pojat omaa luokkaansa"</i>	Vesa Sirén
8.10.2006	Helsingin Sanomat	<i>"Onko erillisopetus tasa-arvon tiellä?"</i>	Helsingin Sanomat
19.10.2006	UTAIN	<i>"Koulu päättää opetustavoistaan itse"</i>	Satu Helin
19.10.2006	UTAIN	<i>"Olkahisen koulukokeilu"</i>	Satu Helin
19.10.2006	UTAIN	<i>"Vanhempien kommentteja"</i>	UTAIN

19.10.2006	UTAIN	<i>"Koulukokeilu porskuttaa, vaikka osa vanhemmista vastustaa"</i>	Satu Helin
20.4.2007	Aamulehti	<i>"Tyttöryhmässä opiskelu voi lisätä tyttöjen itsetuntoa"</i>	Piia Rantio
01.06.2007	Aamulehti	<i>"Ensin persoona, sitten sukupuoli"</i>	Riikka Lehtovaara
10.08.2007	Aamulehti	<i>"Koulu kutsuu. Opettajille riittää töitä, kun ikäluokat alkavat kasvaa"</i>	Heini Maksimainen

Category A: Highlights of the reports on *Olkabisen koulu* from its foundation to the end of the project

"There's a girl's and boy's class in *Olkabisen koulu*" ("*Olkabissa on tyttöluokka ja poikaluokka*") was the first account on the project in *Aamulehti*'s *Uutisivut* on page 5 of its 16.09.2006 issue. Piia Rantio wrote briefly below the title: The experiment intends to look for the suitable teaching methods for the first grade boys and girls.

Teachers' and pupils' comments were interspersed throughout the write-up. The teachers remarked on what they have done to prepare their classes because there were no existing materials. The pupils' general opinion is that the solution works very well. Girls enjoy best being with girls and the boys with the boys. (Holopainen, 2006, 5.)

About two weeks later an invitation to an open discussion is published in *Aamulehti*'s *Uutisivut* page 5 (05.10.2006 issue) entitled, "Does the school discriminate against the boys?" ("*Syrjiikö koulu poikia?*"). The event was organized by *Aamulehti* to celebrate "World Teachers' Day" and it was to be held in their auditorium. It was open to anybody and the interested participants were requested to send questions to the panelists in advance.



The catch that was on the invitation read:

The boys lag behind the girls in comprehensive school. The boys also show more learning difficulties and become troublemakers more often than girls. What should the school do? Do boys and girls need different teaching methods or would this lead to highlighting unnecessary gender differences? Does the PISA success tell the whole truth about the daily life in schools and learning results? (*Aamulehti*, 2006, 5.)

The following day's issue claims, "More than half back up separate boys' and girls' classes in schools" ("*Yli puolet kannatti kouluihin erillisiä tyttö- ja poikaluokkia*") on page 7 of the section on Domestic News. Though at first glance this article may have been included under Category B, I chose to include it here because of its matter-of-fact style, with more focus on information than on opinion.

The article cites opinions of various participants and includes the results of the audience's response to three questions at the end.

Do you support founding boys' and girls' classes?		
YES, in the preschool and in the early learning stage.		53.1 %
YES, in the whole comprehensive school.		2.0 %
NO, never.		44.9 %
Which gender receives more teachers' attention?		
Girls		13.6 %
Boys		86.4 %
Should a separate class be founded for gifted children?		
YES		47.0%
NO		53 %

According to the article, the majority of the panelists and the audience agreed that there are differences in the children's interests and the consideration of this aspect improves learning. In general, though, the audience considered that there are more differences among individuals than between genders. (Mäenpää & Ekholm, 2006.)

During the same week *Helsingin Sanomat* produced its first report on this project on its Sunday issue, 08.10.2006, "Boys and girls in their own classrooms" ("*Tytöt ja pojat omaa luokkaansa*"). The style of the feature article was similar to *Aamulehti*'s first coverage. A description of the children's comments and the day's activities provided a charming view from an outsider's and an adults' framework.

The same Sunday issue of *Helsingin Sanomat* included a short commentary entitled, “Is single-sex education the road to equality?” (“*Onko erillisopetus tasa-arvon tiellä?*”). The commentary begins by stating the fact that the last boys’ and girls’ schools in Finland ended in the 1970s with the education reform. Such type of education where boys and girls were taught according to the traditional boys and girls roles was considered a relic from the past.

UTAIN came up with four articles on their web site of 19.10.2006. The first short article contains the comments of Ms. Irmeli Halinen, the Director of The General Education Division of the National Board of Education then, when asked about the experiment. She states that school experiments are no longer supervised since the right of inspection had been renounced in the 1990s and as such the *Olkabisen koulu* does not need to ask for a special permission for the experiment. At present the supervision of schools is a function undertaken by the municipalities and provinces. Ms Halinen confirms that there are many experiments at present all over Finland, where children are grouped according to their skills. However, there are no other boys’ and girl’s grouping at the moment other than in *Olkabisen koulu*.

Another write up simply presents the core ideas of the experiment in five bullet point-phrases.

The last piece of writing from UTAİN is more interesting because it gives an insight into the parents’ response to the email survey that was conducted 13. – 17. 10. 2006. Ten short remarks were printed ranging from “full support” to “the principal arranges the opinion-survey in order to receive compliments on the project”. There were seven quotes from the mothers of the pupils and three from the fathers. As a whole there were six positive comments and four which were not in favor.

In *Aamulehti*’s *Uutisviikot* page 8 of its 20.04.2007 issue we are introduced to the initial findings of the research that had been conducted by the Academic Researcher Markku Niemivirta from the Helsinki University and three university students’ pro-gradu papers under his tutelage. As can be deduced there are no conclusive findings which can be directly linked to the influence of the single-sex grouping in the academic results of the *Olkabisen koulu* pupils as compared to the pupils of the control group. Although in some subjects the pupils of *Olkabisen koulu* showed more interest and motivation Academic Researcher Niemivirta states that the difference observed may be due to the experiment or maybe not. Furthermore he acknowledges that in order to be able to follow up the academic results the experiment must be continued and more investigation must be carried out.

At the end of the school year Riikka Lehtovaara writes an article entitled “A person first, gender after” (*“Ensin persona, sitten sukupuoli”*) in *Aamulehti’s Artikkelisivut* page 2 (01.06.2007 issue) that succinctly summarizes what has been achieved by the *Olkabisen koulu* experiment. Among the conclusions were:

- The daring initiative of the principal deserves respect.
- Principal Rangell believes that girls became more courageous and that the boys took the challenge of difficult math tasks more readily than the boys of the control group.
- The principal also admitted that the differences between individual learners are greater than between the sexes.
- The experiment aroused an interest among researchers and officials in a way that more scientific information on this subject is to be expected.
- The single-sex class will be discontinued due to the lack of funding and the lesser number of pupils.

The first grade pupils’ learning is best supported if the teacher has time to learn the ways of learning first as an individual person, and secondly as a boy or girl.

## **8.2 Articles that favored the initiative**

From the group of articles that have been supportive of the project, two recurring themes were found and for this reason this category has been further divided into two sections. There were nine articles from the set of twelve that welcomed the initiative as a relevant and clever pedagogical experiment (B1); five articles expressed their hope that the experiment would be very beneficial for improving the boys’ performance (B2). Two articles discussed the two themes in their content.

One article noted that the single-sex classes in the elementary level was a clever undertaking and even wished that such a system could be extended to other levels. A text message commentary by a father also hoped that the experiment would become permanent and extend to the whole country. He believes that the Finnish society needs all the possible means to increase knowledge. (Päivän tekstarit, 2006.)

Hannu-Pekka Lappalainen, an education consultant from the Board of Education, described the experiment as a “very important pedagogical experiment” (*erittäin tärkeä pedagoginen kokeilu*) while Leena Harkimo, a member of the Parliament, commended that (*uudistamisbenkeisesti ja ennakkoluulottomasti toteutettu opetus tyttö- ja poikaryhmissä on ehdottomasti kokeilemisen arvoinen hanke parempien oppimistulosten ja*

*tulevaisuuden tasa-arvoisuuden edistämiseksi*) “an innovative and unbiased teaching carried out in boys’ and girls’ groups is absolutely worth experimenting in order to improve learning results and to promote equality in the future”. This view was further corroborated by the result of the “Different learners-coeducation school-project” (*Erilaiset oppijat-yhteinen koulu-hanke*) that showed that there is a need for teaching methods that takes into consideration the different learning styles.

Finally, Hannu Laaksola in his editorial section in *Opettaja-lehti* stressed that single-sex education will not return, but instead may be considered as in-house solution in teaching groups and schools, if they are founded pedagogically.

**Table 21. Articles that Reflect *Olkahisen Koulu* as a Clever Pedagogical Experiment**

Date	Publication	Title	Author
19.9.2006	<i>Aamulehti</i>	”Kuka tarvitsee autoista kiinnostuneita tyttöjä?”	Mia Lepaus
26.9.2006	<i>Aamulehti.</i>	Päivän tekstarit	Several text messages writers
26.9.2006	<i>Aamulehti</i>	”Poikia ja tyttöjä ei eristetä”	Pasi Rangell
6.10.2006	<i>Aamulehti</i>	”Yleisökeskustelu: Tytöt ja pojat oppivat yksilöinä”	Jenni Mäenpää & Virpi Ekholm
8.10.2006	<i>Aamulehti</i>	”Pojat tarvitsevat eriytettyä opetusta”.	Aamulehti
13.10.2006	<i>Helsingin Sanomat</i>	”Sekaluokassa sukupuoliroolit vahvistuvat”	Timo Laes
13.10.2006	<i>Helsingin Sanomat</i>	”Koulun tyttö- ja poikaryhmiä kannattaa kokeilla”	Leena Harkimo
22.10.2006	Opettaja n. 42	”Erilliskoulut eivät palaa”	Hannu Laaksola
20.4.2007	<i>Aamulehti</i>	”Kokeilu vaarassa loppua rahapulaan”.	Piia Rantio

The five articles in Category B2 demonstrate an evident concern for the boys' academic performance and personal development. As the experiment originated because of the scholastic underachievement of the boys, some of the texts showed interest that the experiment would succeed in favor of the boys.

One observation is that our present school system adapt well for the girls and for this reason they succeed and get top marks. However, the boys get frustrated in this system and in some cases, begin to be disturbers or even, aggressive. In a boys' class the boys will be able to develop and learn at their own pace, in a more peaceful atmosphere. (Rantio, 2007.)

**Table 22. Articles in Favor of the Initiative for Boys' Development**

Date	Publication	Title	Author
16.9.2006	<i>Aamulehti</i>	"Jako kahteen, tytöt ja pojat eri luokkiin"	Piia Rantio
16.9.2006	<i>Aamulehti</i>	"Erityisesti pojat tarvitsevat omaa ryhmää"	Piia Rantio
27.9.2006	<i>Aamulehti</i>	"Annetaan poikien olla poikia"	Asko Alajoki
29.9.2006	<i>Aamulehti</i>	<i>Päivän tekstarit</i>	Several text message writers
8.10.2006	<i>Aamulehti</i>	"Pojat tarvitsevat eriytettyä opetusta"	Aamulehti

### 8.3 Opposition to the initiative

As in every initiative, there are always those that see the advantages of the project and those that do not. It is but natural that we react rather cautiously to matters that are rather new and different for us. Most of us prefer our defined comfort zones. Few among us are risk takers. In any case, it is always beneficial to be open to novel ideas, and study them before making any final judgments. After all, there should always be room for freedom and creativity. The respect for the freedom and creativity of others demand that we are able to listen to the arguments in an impartial way, and be able to distinguish facts from opinions, fiction from reality, and passion from reason.

Interestingly enough there were only four out of twenty-eight articles that discussed the experiment directly that were skeptical in tone and against the plan. Perhaps those who were not in favor used other media or wrote texts beyond these publications I have selected for this survey. Or perhaps there

are really just a few who belong to this camp although one would think and suppose that in our coeducational Finland, there would be more protests than advocacy.

Three different themes were presented in these four articles. One is the notion that the experiment is a return to having an elite school; another theme was that individual learning styles should be the criteria for separation and not gender, and finally, an accusation that the experiment promoted “gender apartheid”.

The writer who had experienced single-sex education in Finland was against the possibility of having elite schools again, a general concept often equated with single-sex education. This person also based her perception on her reading of the bibliographies of great leaders who were mostly graduates of boys’ schools. According to her the *Olkabisen koulu* experiment will be a way to assert this masculine culture more. (Halonen, 2006.)

The Academic Researcher advises that focusing more on different individuals rather than gender segregation would be a better solution in improving the boys’ lack of motivation (Rantio, 2006). Another opinion expressed that biological differences cannot be denied in education but the writer awaits teaching methods that would be more reconciled with inherent temperament rather than sex (Kaitaniemi, 2006).

The strongest opposition to the experiment was presented by an opinion letter signed by Anu Hirsiaho and entitled, “A diehard/ conservative experiment” (“*Patavanboillinen kokeilu*”). In her opinion, the model (of *Olkabisen koulu*) is based on the idea of segregation or some gender apartheid. It presupposes the idea of gender as something predestined and unchanging. (*Malli perustuu ajatukseen segregatiosta, tai jopa sukupuolittuneesta apartheidista. Sen taustalla on olemuksellinen käsitys sukupuolesta jonain ennältämäärättyinä ja muuttumattomana.*)

She also emphasized that the experiment is not radical but conservative... Boys’ and girls’ schools sound like a typical narrow-minded educationalist’s “quick fix” to an isolated problem, boys weaker than girls in Finnish studies in the third grade. (*Tyttö- ja poikaluokat kuulostavat tyypilliseltä kapeakatseisen kasvatustieteilijään “nopealta fiksauselta” yksittäiseen ongelmaan, poikien tyttöjä heikompiin äidinkielen tuloksiin kolmannella vuosiluokalla.*) (Hirsiaho, 2006.)

**Table 23. Articles that Expressed Opposition to the Initiative**

<b>Date</b>	<b>Publication</b>	<b>Title</b>	<b>Author</b>
22.9.2006	<i>Aamulehti</i>	<i>"Patavanhoillinen kokeilu"</i>	Anu Hirsiaho
28.9.2006	<i>Aamulehti</i>	<i>"Takaisin Tipulaan?"</i>	Irma Kaarina Halonen
30.9.2006	<i>Aamulehti</i>	<i>"Oppiiko tavallisesta poikkeava lapsi?"</i>	Tiina Kaitaniemi
3.10.2006	<i>Aamulehti</i>	<i>"Työt eivät luota kykyihinsä, poikia koulu ei kiinnosta".</i>	Piia Rantio

## 9 Other Issues Related to Single-Sex Education in Finland

After going through the case study and the media and public discussion surrounding it, it is now time to study the secondary issues regarding coeducational education and single-sex education on a nationwide basis.

In 2006 a web discussion based on the findings of The Annual of The Living Conditions of the Young (*Nuorten elinolot- vuosikirja*) stated that illness builds up more noticeably in boys than in the girls. Some of the comments were

Boys are regarded in a negative way. It is not difficult to notice that a great majority of adults consider boys as causes of disorder...Signed by: Time for children (*Aikaa lapselle*)

Boys are inherently wilder than girls and demand stricter rules. Signed by: Atro

The lives of many young boys are somewhat like a state of war from the elementary level to high school...One is not allowed to be good in school, rather the more bad behavior, the more value. Signed by: Tuntiopettaja (*Subject teacher*)

I believe that the men's dumbness is due partly to linguistic underdevelopment, therefore thinking also remains a great deal on a very simple level. But what do you do when the only alternative is to be rejected by the group, be discriminated upon and be labeled a homo? Signed by: Arttu

These are just some of the concerns expressed regarding the education of the boys in our contemporary society. What have caused these observations if we are supposed to be enjoying equality of the sexes in our society? Where has our educational system gone wrong? Is the traditional presence of female teachers especially in the elementary level detrimental to the boys' motivation and character development?

**Table 24. Articles that Defined the Other Key Issues**

Date	Publication	Title	Author
18.12.2006	<i>Helsingin Sanomat</i>	"Pojat painivat kovuuden vaatimuksissa"	Keskustelu verkossa
12.12.2007	Opettaja n. 1-2	"Vielä tasa-arvosta"	Arno Kotro
06.10.2009	<i>Helsingin Sanomat</i>	"Sukupuolinentraali koulu on ajatuksena kestävä"	Arhi Kuittinen



## 9.1 The concern for the poor results in the study of the Finnish language

The articles from 2006 and 2007 show concern for the poor results and poor attitude of the boys towards learning their native tongue. In 2006 after another evaluation conducted by the Board of Education was made involving 6 000 seventh graders from 130 elementary schools, the results still confirm the weak performance of the boys, particularly in writing or composition. (Liiten, 2008.) A very interesting side comment in an editorial was that teachers patch up the boys' failure by giving them high grades more than that adequate to the skills (Helsingin Sanomat Editorial, 2008).

**Table 25. Articles Related to the Boys' Academic Underachievement**

Date	Publication	Title	Author
22.2.2006	<i>Helsingin Sanomat</i>	<i>"Miesten syrjäytyminen jäänyt huomiotta"</i>	Timo Kitunen
9.9.2006	<i>Helsingin Sanomat</i>	<i>"Opiskelkaa pojat jotta pärjätte kuin tytöt"</i>	Anja Salminen
13.2.2007	<i>Helsingin Sanomat</i>	<i>"Arviointi: Jo toisella luokalla tytöt parempia äidinkiessä"</i>	Marjukka Liiten
29.11.2008	<i>Helsingin Sanomat</i>	<i>"Äidinkielen tunneilla parasta ovat ryhmätyöt"</i>	Minna Passi
29.11.2008	<i>Helsingin Sanomat</i>	<i>"Päättökokeet kaikille"</i>	Marjukka Liiten
29.11.2008	<i>Helsingin Sanomat</i>	<i>"Poikien kirjoitustaidot luvattoman heikot"</i>	Marjukka Liiten
2.12.2008	<i>Helsingin Sanomat</i> <i>Pääkirjoitus</i>	<i>"Äidinkielen opetukseen lisää taitoa"</i>	Helsingin Sanomat

## 9.2 The concern for the slower development of the boys and the rise of ADHD diagnosis and medication

The sources for the next category were four articles on the biological development and school maturity of the boys followed by four articles on the identification of attention deficit disorders.

Among the ideas that present itself when discussing the boys' later development as compared to girls are the boys' shorter memory span and the lack of fine motor skills, which are necessary in managing

well and enjoying the early years in school. The attention span is crucial for being able to follow the teacher's direction or to be on task. Fine motor skills are needed in acquiring handwriting skills which are done during the Finnish lessons. As boys develop these skills much later they lag behind in writing. Thus they often receive criticism for awkward or messy handwriting. These experiences from the first years of school affect their attitude to the Finnish classes. (Helsingin Sanomat. Keskustelua verkossa, 2007.) Moreover, another criticism is the lack of reading materials suitable to keep the boys interested for a longer period (Helsingin Sanomat, 2007).

Finally one opinion article suggests delaying the boys' entering into school much later than the girls.

A subtopic that affects the boys more is the growing number of ADHD cases since 2007.

Keith Low in about.com defines ADHD

Attention deficit hyperactivity disorder -- also referred to ADD or ADHD -- is a biological, brain based condition that is characterized by poor attention and distractibility and/or hyperactive and impulsive behaviors. It is one of the most common mental disorders that develop in children. Symptoms may continue into adolescence and adulthood. If left untreated, ADHD can lead to poor school/work performance, poor social relationships and a general feeling of low self esteem. (<http://add.about.com/od/adhdthebasics/a/ADHDbasics.htm>)

An article in *Helsingin Sanomat's* Science and Nature section gives an account of the results of the *Lapset*-research which demonstrated that the disorder exists in 2 % of the girls and 6 % of the boys. The statistics in Finland for the use of stimulant therapy (*stimulanttiboito*) as a treatment for ADHD in the years 1968-1988 was rather insignificant. After this its use has grown dramatically. In 1999-2005, the rise has nearly multiplied 16 times. In 2005, the patients below 18 years old receiving this therapy was 63 %. (Nordquist, 2007.)

**Table 26. Articles Related to ADHD and Other Developmental Problems**

(Please note that the order is not chronological but according to the themes described in the aforementioned paragraph).

<b>Date</b>	<b>Publication</b>	<b>Title</b>	<b>Author</b>
14.2.2007	<i>Helsingin Sanomat</i>	<i>"Mistä lasten osaamiserot johtuvat?"</i>	Keskustelua verkossa
19.5.2007	<i>Helsingin Sanomat</i>	<i>"Pohjoisen poikia kannustetaan koulukäyntiin"</i>	Marjo Valtavaara
11.8.2008	<i>Helsingin Sanomat</i>	<i>"Kouluiässä virtaa riittää"</i>	Jouni Tikkanen
4.2.2009	<i>Helsingin Sanomat.</i>	<i>"Pojat puoli vuotta myöhemmin kouluun"</i>	Tuula Kauppila
16.1.2007	<i>Helsingin Sanomat.</i>	<i>"Ylivireä ADHD -lapsi saa lääkkeitä"</i>	Andrea Nordquist
9.11.2007	<i>Helsingin Sanomat.</i>	<i>"Hoito lievittää ADHD:stä kärsivän impulsiivisuutta"</i>	Päivi Repo
9.11.2007	<i>Helsingin Sanomat</i>	<i>"Moni nuori jää yksin ihmiseksi kasvun kanssa"</i>	Sari Manninen, Tuuja Huuki ja Vappu Sunnari
11.8.2008	<i>Helsingin Sanomat</i>	<i>"Poikien koulu takkuua enemmän"</i>	Tietokulma

### 9.3 Focus on teachers' training, the need for reform in our educational system, and the need for more male teachers.

According to several articles teachers should be encouraged to go through courses on gender studies or training in their education in order to become more sensitive to the developmental needs of their pupils. An interesting consequence of all these discussions about gender and equality is the TASUKO-banke or *Tasa-arvo- ja sukupuolitietoisuus opettajankoulutuksessa* project sponsored by the Ministry of Education for 2008-2010.

Kirsi Lindroos (2008) from the Ministry of Education affirms that the present educational system promotes the girls' success but not the boys'. A multifaceted school culture is needed with new didactic materials, methods and atmosphere designed according to individual needs.

If teaching should be improved the presence and increase in the number of male teachers would be one welcome solution. The educational system somehow does not seem attractive to the males. This is unfortunate when the male figures can contribute a lot in creating a balance in the school environment and in the education of the children. Another sociological reason for the need for male teachers is the undeniable increase in children without a father figure or male model to refer to. The recruitment of male candidates who have the talent and character to this professional field should be part of the renewal in our educational system and workforce.

**Table 27. Articles Related to Teachers and Educational Reform**

<b>Date</b>	<b>Publication</b>	<b>Title</b>	<b>Author</b>
7.9.2006	<i>Helsingin Sanomat</i>	<i>"Koulu ylläpitää yhä sukupuolirooleja"</i>	Marjo Vuorikoski
22.10.2006	<i>Aamulehti</i>	<i>"Vastakaiku: Peruskoulu remonttiin"</i>	Anna-Maaria Hartman
22.10.2006	<i>Aamulehti</i>	<i>"Vastakaiku: Peruskoulu remonttiin"</i>	Jussi Hietala
8.2.2007	<i>Aamulehti</i>	<i>"Koulusta vauhtia samapalkkaisuudelle"</i>	Kirsi Lindroos
3.6.2007	<i>Helsingin Sanomat</i>	<i>"Liian hyvät kymppin tytöt"</i>	Annamari Sipilä
13.6.2007	<i>Helsingin Sanomat</i>	<i>"Koulutuksen tasa-arvon myytit on pubkaistava"</i>	Marjo Vuorikoski
15.3.2008	<i>Helsingin Sanomat</i>	<i>"Peruskoulun oppimiskulttuuria monipuolistettava"</i>	Kirsi Lindroos
20.11.2009	Opettaja n. 47	<i>"Peruskoulu tuottaa sukupuolieroja"</i>	Maija-Leena Nissilä
7.10.2009	<i>Helsingin Sanomat</i>	<i>"Sukupuolinentraali liikuntaryhmä ei toimi"</i>	Maiju Ristkari
24.7.2007	<i>Helsingin Sanomat</i>	<i>"Opettajankoulutukseen tarvitaan miehiä"</i>	Marja Männistö
16.6.2007	<i>Helsingin Sanomat</i>	<i>"Opettajiksi kaivataan tummataustaisia miehiä"</i>	"Oikeudenmukaisuuden puolesta" (Julkaistu kirjoituksen poikkeuksellisesti nimimerkillä)
1.8.2007	<i>Helsingin Sanomat</i>	<i>"Pojissa ei hyväksytä tyttömäisiä piirteitä"</i>	Pirkko Leino ja Anna-Kaisa Mustaparta

Pirkko Leino (2007) concludes in her article that the Teacher's College does not choose "nice girls" nor "naughty boys" but those applicants that are believed to have the best qualifications to become good teachers. Male and female teachers are needed. The greatest shortage is that of audacious men who dare to be human to others. (*Opettajankoulutuslaitoksiin ei valita "kilttejä tyttöjä" eikä "tuhmia poikia" vaan niitä pyrkijöitä, joilla uskotaan olevan parhaat edellytykset kehittyä hyväksi opettajiksi. Tarvitaan sekä mies- että naisopettajia. Suurin puute on rohkeista miehistä, jotka uskaltavat olla ihmisiä ihmisille.*)

#### 9.4 Gender-Neutral Education

The last category in this chapter summarizes the points that were written in the Opinion pages of *Helsingin Sanomat* in October 2009 as a result of a round table discussion presided by the Minister called "Boys and Girls in School" (*Tytöt ja pojat koulussa*). The theme revolved around the measures against segregation starting from the early years of education. The following is a gist from the Ministry of Education's section on Composite News Bulletins of September 2009:

The Minister of Education and Science, Henna Virkkunen, has appointed a committee to examine how teaching and education could be used to decrease gender discrimination in schools and the world of work. By May 2010 the committee must make its proposal for measures for alleviating segregation to be implemented in conjunction with the reform of basic education curricula. Measures to decrease segregation will be taken into account in the reform of the lesson-hour quota and framework curriculum, Virkkunen promises.

All the articles were of the same opinion that individual differences must be supported more than gender differences.

**Table 28. Articles that Referred to Gender-Neutral Schooling**

Date	Publication	Title	Author
6.10.2009	<i>Helsingin Sanomat</i>	"Sukupuolierottelu kitkettävä kasvatuksesta"	Markku Suokonautio
8.10.2009	<i>Helsingin Sanomat</i>	"Sukupuolineutraali koulu haastaa stereotyyppiset"	Mina Laamo
11.10.2009	<i>Helsingin Sanomat</i>	"Sukupuolineutraalins ei tarkoita tasapäästämistä"	Maiju Ristkari

## 9.5 Brain research

Kaarina Tonteri, a psychologist and adult educator, called attention to the innate brain types according to the sex of the person and its functions. She stressed that the innate differences are permanent although one also has to take into consideration other factors that can affect learning.

In the same year a report by OECD entitled “Understanding the Brain: The Birth of a Learning Science” and Marja Puustinen commented on this and the seminar based on this material in *Opettaja lehti*. The report highlights the ongoing and advanced dialog between brain research and anthropology. In the field of education it can serve to understand children more.

**Table 29. Articles on Brain Research and its Application**

Date	Publication	Title	Author
18.2.2007	<i>Helsingin Sanomat</i>	<i>”Sukupuolilla on luontaisiakin eroja”</i>	Kaarina Tonteri
5.10.2007	<i>Opettaja</i> n. 40	<i>”Aivotutkimuksesta kumpuaa uuden opettajuuden vaatimus”</i>	Marja Puustinen

## 9.6 Gender-Sensitive Education

In 2008 continuing the discussion on the importance of gender equality in the schools, the concept of gender-sensitiveness (*sukupuolisensitiivisyys* or *sukupuoliberkkäys*) came up. In Marjo Vuorikoski’s letter published in the Opinion section, she undersigns that a gender-sensitive way of thinking and consciousness is crucial in the renovation of teachers’ training. She remarks that in Finland a stubborn and vivid illusion of gender equality and the school’s gender neutrality hinders the schools from working on gender equality in a very conducive way.

In one of *Opettaja lehti*’s issue that same year, Maija-Leena Nissilä emphasized also the prevalent idea that gender sensitive education must become part of the teachers’ training program so that this knowledge can serve to forward equality. She corroborates that a school that values equality is not gender neutral but gender sensitive. One must be able to react to the needs of both sexes. In school discussions a very simplistic boys’ and girls’ antithesis must be avoided. (*Tasa-arvo koulu ei ole*

*sukupuolineutraali vaan sukupuoliberkää. Koulussa on reagoitava molempien sukupuolten tarpeisiin. Koulukeskusteluissa on myös syytä välttää yksinkertaistavaa tyttöjen ja poikien vastakkainasettelua.)*

Finally Minister of Culture and Sport, Stefan Wallin, joins the discourse on gender sensitiveness and its incorporation into the teachers' training program in an interview article published in *Opettaja lehti*. He is optimistic of the Tasuko project mentioned in Chapter Nine, affirming the fact that teachers need a preparedness to manage stereotype gender expectations and they long for means to struggle against them with a positive approach. (*Opettajat tarvitsevat valmiuksia käsitellä stereotyyppisiä sukupuolirooli-odotuksia ja kaipaavat keinoja taistella niitä vastaan positiivisella otteella.*)

**Table 30. Articles Related to Gender-Sensitiveness**

<b>Date</b>	<b>Publication</b>	<b>Title</b>	<b>Author</b>
17.10.2008	<i>Opettaja</i> n. 42	"Tasa-arvotietoa opettajankoulutukseen"	Maija-Leena Nissilä
13.3.2009	<i>Helsingin Sanomat</i>	"Koulumenestys kytkeytyy sosiaaliseen taustaan"	Marjo Vuorikoski
24.4.2009	<i>Opettaja</i> n. 17	"Robkeasti omalle tielle"	Tiina Tikkanen

## 10 Summary and Conclusions

In a classic work on Case Study Research, Robert Stake affirms that the researcher struggles to liberate the reader from simplistic views and illusion. The researcher is the agent of new interpretation, new knowledge, but also new illusion. Sometimes the researcher points to what to believe, sometimes facilitating reader understandings that exceed the comprehension of the researcher. (Stake 1995, 99).

As the above quote affirms, I have carried out this research with the desire to gauge what is the real panorama of single-sex education in Finland. In the beginning I must admit that I had a simplistic notion of the Finnish view and attitude regarding this issue. This was due to the non-existence of such education, the overpowering conviction of the equality of gender and the conformist attitude that is characteristic of our nation.

The study of *Olkabisen koulu* described in Chapter Six paved the way for the survey on the general notion of single-sex schooling in contemporary Finland, the materials needed for its implementation, the pedagogical motivation behind such an experiment, and the need for support from various sectors of the community. At the end of the chapter an evaluation of the experiment was presented by the researchers and by the parents of the pupils. The experiment could not be continued due to lack of funding and the decreased number of students; thereby, the results of the experiment remain inconclusive. Nevertheless, the daring initiative of Principal Rangell has been noted to be a considerable contribution in the field of education and open discussion of our educational system in public.

In answering the first research question, I found that the number of articles that clearly favored the possibility of having single-sex education was three times higher than the number of articles that strongly opposed the initiative. This was an interesting discovery. Of course one cannot describe this result as conclusive. There may be several reasons why the non-advocates were not very active in expressing their views about the issue. Some of the reasons may be:

- They used other means or other publications aside from those considered in this study.
- They may simply have preferred to be indifferent to the discussion.

On the other hand, the advocates of single-sex education gave the following reasons for supporting an initiative like *Olkabisen koulu*:

- The initiative was a relevant and clever pedagogical experiment.
- The initiative was perceived as one of the possible solutions in upraising boys' achievement and motivation towards schooling.



The main ideas derived from the articles analyzed were that the experiment reflected an interesting innovation and that it also took into consideration developmental differences between boys and girls, particularly in the early years of formal education. Based on the above findings one can say that there is a sense of readiness in accepting this form of education. This view is further strengthened by the fact that there are worldwide projects (such as the PISA 2009 Report, the annual Official League of Schools table of UK) which manifest the relevance and importance of the subject as shown in their assessment studies. On a local level, the findings presented in the recent DUODECIM conference last February 2010 instill in the minds of the general public, educational authorities and policymakers the vital need to heed the importance of natural developmental differences in education. Moreover, the forthcoming results of the TASUKO project due at the end of this month, will hopefully enhance gender-sensitive education and decrease gender stereotyping in the current educational system.

Chapter Seven briefly described how data was gathered and the selection process in order to focus on the primary topic and the relevant issues. These practical issues came from the articles that were the results of phrases used when checking up the archives. As “*erilliskoulu*” produced no results when typed on the Search Box the following key words were used:

Boys and girls in school	<i>(tytöt ja pojat koulussa)</i>
Equality in school	<i>(koulun tasa-arvo)</i>
Boy and girl class	<i>(tyttö ja poika luokka)</i>

The articles gathered from the archives led to the discovery of the following key issues that shed light on what other ideas are connected or associated with single-sex schooling in the minds of the Finns, whether educational authorities, politicians, parents, to mention a few:

- Equality in school and educational equity
- Feminist orientation regarding gender
- The boys’ underachievement in the study of Finnish language
- The rise of ADHD cases among the boys
- The need for reform in the elementary education
- The need for more male teachers
- Teacher training
- Lack of knowledge of the recent neurobiological findings and its application in education.

The articles that referred directly to *Olkahisen koulu* and the experiment were summarized in Chapter Eight. All in all there were 28 articles: twelve informative reports, twelve articles in favor and four articles that opposed the initiative.

The eight pertinent issues listed on the previous page were categorized in Chapter Nine according to these three major subheadings:

- Concern for the poor results of the boys in the study of the Finnish language
- Concern for the underdevelopment of the boys and the rise in number of ADHD cases among them in the last decade
- Focus on teachers' training, the need for reform in our educational system, and the need for more male teachers.

The other topics included in this chapter were the current controversy on gender-neutral education as proposed by the Minister of Education in fall 2009, the scarcity of theoretical materials on brain research discoveries and its lack of application in the current educational system, and finally, the clarification of gender-neutral education versus gender-sensitive education in the promotion of true equality.

Finally, what are the future possibilities for single-sex education in Finland based on the content analysis?

I believe that there is a good room for initiating single-sex education on a gradual level in our country after studying the articles considered in this study. This conviction comes from the fact that

- Several educators and researchers have stressed the importance of considering more and respecting the developmental differences in the children who are entering school. This statement is backed up by the Duodecim conference report, select articles published in the *Opettaja-lehti*, and in *Helsingin Sanomat*, particularly in 2007-2008.
- There are innumerable proofs from international research on the benefits of single-sex education in academic achievement and character development, and Finland cannot fall behind in this knowledge especially as we become more multicultural and global.
- There are legal documents that welcome this pedagogical initiative, proving the fact that although mixed education seems to be an accepted norm in Finland, it is neither unconstitutional nor

discriminatory for other education providers to be authorized to found educational initiatives based on this pedagogical conviction.

As mentioned in the Introduction, this research was conceived of as a preliminary survey and not an in-depth study. Its significance lies in providing stepping stones for further experimental research based on the issues that were associated with the key phrases used in the data acquisition. Some examples for future research topics could be:

2. Would single-sex grouping improve significantly the boys' motivation for and academic performance in the study of Finnish language in the elementary level?
3. Would single-sex classes decrease the possibility of diagnosing lively, active boys as ADHD cases?
4. Would single-sex schooling encourage students to select and opt for non-traditional choices in their further or higher studies, i.e., girls selecting careers in math and sciences, boys choosing humanities and social work studies?
5. Would an increase in male teachers improve the students' performance and attitude and create a "balanced" learning environment?
6. How will the TASUKO findings be implemented? Will they prove effective?

An important matter that was often referred to in many articles is the term and concept of equality. In almost all the articles analyzed in this research the term equality is identified with educational equity, which is giving everyone access to basic education. The laws in our Constitution and the sections mentioned in the Basic Act on Education as well as in the Principles of the National Core Curriculum for Basic Education express the provision of this basic right. This is truly laudable. This access to education is also one of the reasons why our youngsters are able to perform well in the PISA assessment tests. In general this right of entry is seen as a determining factor in the provision of teaching materials and the choice of teaching methods which must be the same for both sexes.

However equality goes beyond the preliminary admittance to a learning institution and access to the same materials; equality demands more. It is giving, in justice, what is due to each one (according to his and her needs). Precisely because everyone has access to education, educators have more room to strive for giving personal attention to the students. In fact a closer study of the same legal documents cited in the preceding paragraph actually leaves room for allowing the implementation of other types of educational options. The pupils may receive "other educational services in accordance with their ability

and special needs, as well as the opportunity to develop themselves” and “the teaching will consider different types of learners and promote gender equality by providing girls and boys with equal rights and responsibilities in society as well as in work and family life”.

What on the onset is seen as inequality is in reality a tool for equality: dealing with every learner as a person with a personal human dignity that includes his sexuality or biological traits.

Another issue was the need for improvement of our educational system especially in the elementary level. There was a generalized observation that the results of mixed education have not been as fair as expected: the system has been shortchanging the boys in schools. There seem to be an inefficacy in the linguistic teaching designed for the boys and the prevailing bias that they are often wild, reckless, unmotivated, and aggressive. The recourse towards some form of medication to calm them down has undoubtedly increased over the past years.

Finally there is a strong need for more males to discover the teaching profession where they can impact on the students’ development and create a balance in the learning environment, that is, so that it cannot remain only as a “woman’s world”.

Last but not the least, the dissemination of recent neurobiological findings and its application in education is urgent. This can be incorporated in the gender-sensitive section of teacher training so that it can enhance present-day and future teachers in addressing developmental differences and in providing the right stimulation for the pupils.

## 11 Food for Thought

I conclude this work by declaring that from the beginning of this project I have conceived the thesis idea with openness and a sense of adventure. Although I was enthused with the neurobiological findings and its application in teaching children, I did not consider it an infallible theory. For this reason doing this investigation has been most rewarding because of the following reasons:

- Acquaintance with a real case in Finland
- Further knowledge of the different perspectives related to single-sex education
- A broadened view of the Finnish educational system and its future
- A sense of gratitude for the different initiatives that have been carried out with respect to equality
- A refreshed sense of innovation, hoping that this survey will contribute to greater exchange of ideas, and even more, to the implementation of this educational option in the future.

We enjoy a high level of public education which we are extremely proud of. Therefore it would be positive to consider a single-sex education learning environment as Finland becomes more globalized and multicultural. It is not at all unconstitutional as the Charter of Fundamental Rights contemplates “the freedom to found educational establishments with due respect for the democratic principles and the right of parents to ensure the education and teaching to their children in conformity with their religious, philosophical and pedagogical convictions” and the Basic Education Act of Finland considers a section on Chapter 3 entitled Other Education Providers, stating that “The government may authorize a registered association or a foundation to provide education...according to a particular ideology...”.

By rereading these legal documents and procuring a deeper understanding of what is equality of rights and what is equality due to the nature of human dignity, educational authorities, government policy makers, private institutions and parents may be inspired to carry out the application of such education based on recent neurological findings. It will need a lot of daring as this project will be on a greater scale unlike the local *Olkahisen koulu* experiment. Nevertheless with the TASUKO project ongoing until May 2010, there would be more interest and relevance in carrying out a gender-sensitive type of education that upholds the natural and basic undeniable equalities of every boy and girl.

Each male and female person is unique and his and her sexual identification is not hierarchical but complementary to each other. Due to the nature of the physical and psychological differences, each

individual must be treated and educated according to their natural needs. The difference is not to be equated with class struggle or one sex is better than the other, they are each simply different.

Child Psychiatry Profesor Tuula Tamminen affirms that sex is an important part of a child's identity; it could neither be denied nor hidden. Sexuality is a necessary biological and psychological attribute. If it is obliterated, by the same token, a great part of a person's personality is wiped out. (Mänttär, 2009.)

This pronouncement is a necessary part of education. The sexual differences are part and parcel of a person's identity and development. These have considerable effects in their development as noted in Chapter Five. A child's sexual identity is not due to what the adults or the society imposes. These defining characteristics should be respected and valued.

In doing this survey, I was greatly surprised by the amount of material that dealt with the boys' underachievement and social problems. Even the PISA report 2009 on gender differences demonstrate a disparity in the test results between boys and girls of the same age group. From several literatures as well, there has been an ongoing concern regarding the rise in medication prescribed to boys who have learning disabilities or behavior problems. As a teacher I find this very frustrating and I believe this is the reason why I believe a boys' grouping can be a strongly positive option for the boys. Oftentimes these pupils are misdiagnosed because the teacher (mostly, female) with a huge class size is simply unable to cater to so many learning needs and non-conformist behavior.

I think this is worth studying in greater depth in view of the many ways our present educational system is shortchanging the boys and encouraging the masculine stereotypes that relate to aggressiveness or impulsive behavior, simply because our boys are not challenged enough intellectually or motivated appropriately.

True enough, in our contemporary society, while most teachers are still highly respected by parents, there are cases now where the opposite occurs and teachers are depreciated and attacked. The teachers are expected to play several other roles in their schools such as that of a policeman, psychologist, and pop star, to name a few. This is very disappointing because instead of focusing on teaching and educating they need to respond to increasing social and psychological problems exhibited by the children. Moreover, there are other factors that complicate the present-day situation:

- big classes (which was not a problem before when the society was more homogenous)
- competition for attention (children are so technically high-wired that they expect entertainment from school and fast-forward rhythm of teaching)

- more children come from family situations that are not stable, and as such they lack the basic readiness for school and even the basic manners.

In one of the articles a way of implementing the consideration of the developmental differences in the renewal of the educational system was suggested by Markku Rimpelä, Development Manager at the Finnish National Board of Education, in “*Tulevaisuuden koulu-joustava kokonaisuus*” in *Opettaja lehti* in 2007. According to him it would be worthwhile contemplating a more flexible school system in the future, in particular, one that allows the children to enter the school system according to their school readiness, not according to the age. This early education phase will possibly be from two to four years. By the third grade the future classes will have children of different ages but their school readiness would be well-matched. This arrangement will help to avoid pupils’ dropout and lonesomeness as well as lessen the need for special education classes in the elementary school. (Rimpelä, 2007, 35.)

On a different angle, I would like to include another personal conviction. Oftentimes we can observe that there are people who make a lot of commotion and who even become aggressive about ecological matters. I value the fact that we are and we need to be more responsible for taking care of our environment and of sustaining our resources for the future. But I do not conform with this type of exhibitionism. I believe in investing on solid grounds. I affirm that by raising the general awareness about gender education, we are supporting global sustainability. What more precious resource can there be than a human being: a child, a teen-ager, a young adult, and so on. For this reason I also loosely refer to gender education as human ecology. A sample definition by the University of Alberta, Dept. of Human Ecology is:

Human Ecology is an interdisciplinary applied field that uses a holistic approach to help people solve problems and enhance human potential within their near environments - their clothing, family, home, and community. Human Ecologists promote the well-being of individuals, families, and communities through education, prevention, and empowerment.

(<http://www.ales.ualberta.ca/hecol/>)

Finally, I encourage the readers to reflect on what were their initial or ingrained impressions of single-sex education and the related issues mentioned in this discussion. Has the reading of this survey afforded new knowledge and fresh perspective into striving for new methods in teaching and in confronting the sexual differences in a positive complementary way, not in an antithetical relation?

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## Attachments

Appendix 5. Pojat ja tytöt eriluokilla alkuopetuksessa (EriKa 1/2007, page 7-10)  
[http://www.ccc.jyu.fi/kasvatusjaopetus/erika/erika\\_1\\_2007](http://www.ccc.jyu.fi/kasvatusjaopetus/erika/erika_1_2007)

### Taustaa kokeilulle

Koulumme ensimmäisen luokan pojat ja tytöt ovat kuluneen lukuvuoden ajan opiskelleet erillisillä poika- ja tyttöluokilla. Innostuin tämän kokeilun aloittamisesta luettuani talvella 2006 Opetushallituksen tekemän oppimistulosten tutkimuksen (Oppimistulosten arviointi. Äidinkieli ja kirjallisuus sekä matematiikka 3. luokalla, 2005). Kiinnostukseni heräsi tyttöjen ja poikien välisten oppimistulosten erilaisuutta kohtaan.

Tutkimusraportissa arvioitiin kolmasluokkalaisten oppimistuloksia äidinkielen osa-alueilla sekä matematiikan taitoja. Äidinkielen valtakunnalliseen vertailuaineistoon kuului 288 suomenkielistä koulua, yhteensä 5136 oppilasta. Mielenkiintoni heräsi, kun tarkastelin tyttöjen ja poikien tuloksia äidinkielen eri osa-alueilla. Oph:n tutkimuksen mukaan kolmasluokkalaisten poikien osaamisen taso on äidinkielessä selvästi tyttöjä heikompi. Erityisen huolestuttava on tilanne kirjoittamisessa. Tytöt saivat n. 68 % maksimipisteistä poikien saavuttaessa tuloksen 50 %. Kirjoitustaidon lisäksi äidinkielen osa-alueista mitattiin lukutaitoa sekä aakkostamis- ja tavutuskykyä. Lukutaidon kohdalla ero oli pienin tyttöjen hyväksi, mutta aakkostamis- ja tavutustaidoissa oli myös selkeä ero tyttöjen hyväksi. Matematiikan osa-alueilla merkittäviä eroja tyttöjen ja poikien välillä ei ollut.

Kiinnostuttuani aiheesta lisää tutustuin myös Oph:n julkaisuun ”Peruskoululaisten kirjoitustaidot kansallisissa oppimistulosarvioinneissa vuosina 1999 – 2005”, jossa arvioinnin kohteena ovat 6.-9.- luokkalaisten. Kun tuloksia tarkastelee vertailemalla tyttöjen tuloksia poikien tuloksiin, on teksti poikien näkökulmasta surullista luettavaa. Tässä otteita julkaisusta:

*Kirjoitustaidon taso 6. luokalla keväällä 2000 (sivu 16): ”Opetusryhmän koolla, perusopetuksen 1.-6. vuosiluokkien äidinkielen kokonaistuntimäärällä tai 6. luokan äidinkielen tuntimäärällä ei ollut yhteyttä saavutettuihin tuloksiin. Alueelliset erot jäivät pieniksi, mutta tyttöjen ja poikien koetulosten erot arvioitiin erittäin suuriksi.”*

*Kirjoitustehtävät 2005 (peruskoulun päättövaiheen opiskelijat, sivu 12 -13): ”Tyttöjen kirjoitustaidon taso arvioitiin 23 prosenttiyksikköä poikien tasoa korkeammaksi. Tulos on samansuuntainen kuin aikaisemmin 9. luokan oppilaille järjestetyissä arvioinneissa, joissa tyttöjen ja poikien kirjoitustaitojen suuret erot ovat tulleet näkyville.”*

*Keskeisiä tuloksia (sivu 2): ”Kirjoitustaitojen yleistaso on ollut tytöillä keskimäärin tyydyttävää tai melko hyvää, pojilla kohtalaista tai välttävää. Näkyville on tullut suuria eroja tyttöjen ja poikien sekä eri jatkokoulutusurille hakeutuvien oppilaiden tuloksissa.”*

Kyseessä on faktaa, jota tutkimustulokset ovat kertoneet jo vuosikausia. Pojat saavat heikompiä oppimistuloksia lähes kaikissa aineissa kaikissa ikäryhmissä! Tilanne ei ole hyväksyttävä. Suomalainen koulujärjestelmä on erittäin hyvä verrattuna mihin muuhun maahan tahansa, mutta jostain syystä se ei ole onnistunut saamaan tyttöjä ja poikia oppimaan yhtä hyvin. Mistä poikien heikommat oppimistulokset johtuvat? Tyttöjen ja poikien oppimiskyvyssä ei ole eroja, mutta tavassa oppia on. Isoa joukkoa sekä pienempiä että isompia poikia nykyiset opetusmenetelmät eivät innosta tarpeeksi.

Olen päätenyt epätieteellisellä ”mutu”- tuntumalla johtopäätökseen, että kyse on motivaatiosta, halusta ja innosta oppia. Ns. perustuntien opetusmenetelmät ovat aikojen kuluessa ohjautuneet enemmän tytöille sopiviksi, eivätkä ne motivoi valtaosaa pojista. Pienet, ekaluokkalaisten pojat eivät osaa ajatella, että ”tämä asia minun kannattaa oppia, koska siitä on minulle varmasti myöhemmin hyötyä”. He työskentelevät lujasti oppimisen eteen, jos opittava asia on mielenkiintoinen tai mielenkiintoisella tavalla esitetty. Yhtä tärkeäksi kuin poikien motivointi kokeilussa näemme omassa hankkeessamme myös tyttöjen rohkaisemisen ja heidän itsetuntonsa kasvun tukemisen.

Pojat ja tytöt eriluokilla alkuopetuksessa (EriKa 1/2007, page 8)

### **Olkahisen koulun kokeilu**

Viime keväänä aloin pohtia, voisiko koulumme tehdä omien oppilaidemme puitteissa asialle mitään. Halusin kokeilla, auttaisiko hankkeemme kaltainen opetusjärjestely sekä poikia että tyttöjä. Ei voi olla niin, että luemme mm. Oph:n tuottamia valtakunnallisia arviointiraportteja tai tutkimuksia, joista huomaamme selvän epäkohdan koulutusjärjestelmässämme, mutta asialle ei silti tehdä mitään konkreettista.

Päätin ehdottaa tulevien ekaluokkalaisten vanhemmille järjestelmää, jossa tytöt ja pojat ovat eri luokilla, jotta voimme helpommin ottaa mm. äidinkielessä sekä matematiikassa huomioon tyttöjen ja poikien erilaiset tarpeet oppimistilanteissa. Vanhemmat näyttivät alkuhämmästyksestä toivuttuaan vihreää valoa kokeilullemme ja pääsimme todenteolla suunnittelemaan tulevaa kokeiluumme.

Olemme toimineet seuraavasti:

Ensimmäisen luokan pojat (20) ja tytöt (16) ovat eri luokilla. N. 70 % oppitunneista oppilaat ovat sukupuolensa mukaisissa ryhmissä. Erikseen opetettavat aineet ovat äidinkieli, matematiikka, toinen liikuntatunneista, kuvataide ja lukujärjestysteknisistä syistä musiikki. Koska emme halua eristää poikia ja tyttöjä toisistaan, opetamme käsityön, luonnonopin, uskonnon sekä toisen liikuntatunneista sekaryhmissä. Sekaryhmät ovat samat mihin oppilaat siirtyvät toisella tai viimeistään kolmannella luokalla. Luokat sijaitsevat aivan vierekkäin, joten opettajat tekevät laajaa yhteistyötä. Ruokailussa pojat ja tytöt ovat sijoitettu tarkoituksella vierekkäin, jotta luontaista jutustelua syntyisi poikien ja tyttöjen välillä. Pojat ja tytöt ovat siis ”erossa toisistaan” vain tietyillä tunneilla, eikä keinotekoisia aitoja ole rakennettu heidän välilleen.

Opetusmateriaalit eli kuvat, kertomukset ja aiheet valitaan pojilla poikien kiinnostuksen ja tytöillä tyttöjen kiinnostuksen mukaan. Tällä pyrimme oppilaan luontaisen mielenkiinnon herättämiseen opittavaa aihetta kohtaan ja sitä kautta luonnollisesti parempiin oppimistuloksiin. Poikia pyritään motivoimaan muun muassa lisäämällä oppitunteihin toiminnallisuutta ja konkreettisia tekemisen hetkiä. Yhtä tärkeäksi kuin poikien motiivoinnin kokeilussa näemme myös tyttöjen rohkaisemisen ja heidän itsetuntonsa kasvun tukemisen. Tähän tavoitteeseen kurkotetaan mm. runsaalla ilmaisuharjoitusten määrällä.

Opettajille kokeilumme on tarkoittanut lisätyötä heidän soveltaessaan opetusmenetelmiä poikien ja tyttöjen tavoitteisiin sopiviksi, mutta toisaalta myös mielenkiintoista jaksoa heidän työhistoriassaan.

### **Tasa-arvon vastaista?**

Aloitimme kokeilumme siis syyslukukauden alusta 2006. Tiedon levitessä myös media kiinnostui kokeilustamme. Aamulehti teki ensimmäisen jutun, jonka jälkeen alkoi melkoinen kuhina lehden yleisönosastolla. Ensimmäiset kirjoittajat olivat tuhtuneita tasa-arvon vastaisesta toiminnastamme. He vertasivat hankettamme jo kuopattuihin poika- ja tyttökouluihin, eivätkä olleet ilahuneita niiden paluusta. Saimme lukea ”patavanhoillisesta kokeilusta” ja kokeiluumme kutsuttiin jopa ”sukupuolittuneeksi apartheidiksi”. Toiminnassamme ei ole kyse paluusta vanhoihin sukupuolijaon mukaisiin kouluihin. Toiminnan tavoitteet ja lähtökohdat ovat hyvin toisenlaiset kuin aikoinaan tyttö- ja poikakouluajattelussa.

Vaarana nähtiin myös, että olemme viemässä tyttöjä kohti vaaleanpunaista tyttömäisyyttä ja poikia kohti sinistä poikamaisuutta. Itse näemme asian niin, että juuri näitä tyttöjen prinsessa- ja poikien Tarzan – stereotyyppioita haluamme sekoittaa eikä missään tapauksessa vahvistaa. Toki tyttöjen pitää saada olla tyttöjä ja poikien olla poikia myös koulussa. Sukupuolettomuus opetuksessa ei voi olla tavoitteena, eikä sukupuolen huomioonottaminen opetusmenetelmien valinnassa voi olla tabu.

Huomasin yllätykseni koulumme olevan paikallisen median lisäksi valtakunnallisen median mielenkiinnon kohteena. Kokeilustamme kerrottiin lehtien lisäksi kahdessa pääuutislähetyksessä sekä joulukuussa Ajankohtaisessa kakkosessa. Samalla tieto toiminnastamme lisääntyi ja huolestuneet kannanotot olivat

Pojat ja tytöt eriluokilla alkuopetuksessa (EriKa 1/2007, page 9)

muuttuneet mielenkiinnon ilmaisuksi. Tajusin, että kokeilumme on sohaissut jotain suurempaa muurahaiskasaa, kuin pelkästään koulun sisäisen opetusjärjestelyjen tai kehittämishankkeiden kasaa.

Onko toimintamme sitten tasa-arvon vastaista? Tasaarvoa mielestäni ei ole se, että kaikkia opetetaan samalla tavalla tai se, että pojilta ja tytöiltä vaaditaan samanlaista oppimistapaa. Välttämättä yleistämistä voidaan silti todeta poikien kaipaavan oppimisessaan usein enemmän toiminnallisuutta, sekä oppimista tekemisen ja esim. rakentamisen avulla. Tytöt sopeutuvat ns. perinteiseen koulumaisuuteen helpommin ja kaipaavat usein rauhallista, kiireetöntä työskentelyä ja saattavat kokea poikien toiminnallisuuden tarpeen tunnin häirintänä.

Tutkimukset väittävät, että pojat saavat koulussa opettajan huomiosta leijonanosan, n. 80 prosenttia. Tytöt saavat mitä jäljelle jää. Erityisopetuksen piirissä olevista oppilaista n. 70 prosenttia on poikia. Ovatko nämä tasa-arvon kannalta oikeita lukuja? Eikö tyttöjen pitäisi saada opettajan huomiosta noin puolet? Miksi erityisoppilaista kaksi kolmesta on poikia? Onko se poikien vika vai onko meidän opetustavassamme korjattavaa, jotta pojat eivät liukuisi tyttöjä herkemmin erityisopetuksen piiriin? Tasa-arvoa opetuksessa olisi mm. se, että pojat saavuttaisivat yhtä hyviä tuloksia kuin tytöt. Se antaisi pojille tasavertaisemmat edellytykset esim. jatko-opintojen suhteen. Poikien oppimiskyky ei ole tyttöjä heikompi, joten mistä huonommat tulokset sitten johtuvat?

### **Erilaiset pojat ja tytöt**

Ymmärrämme, että kaikki pojat eivät ole samanlaisia, kuten eivät tytötkään. Tarkoituksemme ei ole ohjata poikia ”poikamaiseen” tai tyttöjä ”tyttömäiseen” käyttäytymiseen, vaan antaa ryhmässä tilaa kasvaa molempia sukupuolia kunnioittavaksi oppijaksi. Uskon, että poika- ja tyttöryhmissä oppilaille on enemmän tilaa olla sellaisia kuin he ovat. Esim. tytöillä on tietynlainen monopoli herkkään käyttäytymiseen, joten herkkä ja rauhallinen poika saa sekaryhmässä helpommin kommentteja tyttömäisestä käyttäytymisestä. Poikien ollessa ryhmässä keskenään tätä rinnastusta ei niin helposti synny. Sama toimii toisinpäin. Pojilla on tietynlainen monopoli vauhdikkaaseen käyttäytymiseen ja rajulla tavalla käyttäytyvää tyttöä rinnastetaan helpommin sekaryhmässä poikamaiseen käyttäytymiseen. Varsin usein kuulee lauseen: Tytöt eivät käyttäydy näin, olepas näitisi!

Kun opetuksessa mennään teknisiin asioihin, tutustumaan johonkin koneeseen tai tietotekniikkaan liittyviin asioihin, valtaavat pojat sekaryhmässä herkästi henkisen ja fyysisen eturivin. Tämä saattaa aiheuttaa tyttöjen vetäytymisen aiheesta, eikä se enää ollutkaan niin kiinnostavaa. Tyttöjen mennessä tutustumaan esim. koneeseen tai tietotekniisiin asioihin keskenään jää heille kaikki aktiiviset roolit käyttöön, jolloin innostus ko. aiheeseen säilyy uskoakseni pitempään.

### **Kuinka arvioimme hankettamme?**

Vanhempien mielipide on ollut meille koko ajan tärkeä. Ilman vanhempien tukea tällaisen hankkeen käynnistäminen ei onnistu. Heidän mielipidettään sekä opettajien onnistumisesta että hankkeen mielekkyydestä kysytään kouluvuoden aikana neljä kertaa. Ensimmäisen mielipidetiedustelun tulokset kertoivat, että vain yksi perhe olisi halunnut lopettaa hankkeen ja siirtyä tavanomaiseen opetusryhmään. Hieman epäileväisen tuen antoi neljä perhettä kaikkien muiden antaessa hankkeellemme täyden tuen.

Toinen mielipidekysely vanhemmille suoritettiin heti tammikuussa 2007 koulun alettua ja vastauksista havaitsimme, että tuki hankkeellemme oli edelleen kasvanut. Yksi lomake palautettiin tyhjänä, mutta kaikki muut perheet antoivat toiminnallamme täyden tuen! Prosentuaalisesti täyden tuen antoi 97 % vastaajista.

Koulun oman kokemuseräisen arvioinnin lisäksi olemme tammikuussa aloittaneet ulkoisen arvioinnin prosessin. Tarkoituksena on, että kolme Pro gradu – työn tekijää tekevät tutkimusta koulumme ensimmäisen luokan oppimistuloksista. Gradun tekijöitä koordinoi Helsingin yliopiston tutkija, joka auttaa, neuvoo ja opastaa gradun tekijöitä ja laatii heidän tuloksistaan laajemman yhteenvedon. Vertailuryhmässä on 120 alueemme koulujen ekaluokkalaista. Tätä kirjoittaessa minulla ei ole vielä selvillä tutkijoiden tarkkoja aiheita. Tuloksia pitäisi olla valmiina loppukevällä ja odotan niitä suurella mielenkiinnolla.

Pojat ja tytöt eriluokilla alkuopetuksessa (EriKa 1/2007, page 10)

Varsinaisia oppimistuloksia verrattuna muiden koulujen ekaluokkalaisiin meillä ei siis vielä ole, mutta kokeneen opettajan arvion mukaan näyttää siltä, että tyttöjen itsetunto ja rohkeus osallistua tuntitilanteissa on kasvanut jo muutaman kuukauden koulunkäynnin jälkeen.

## Jatko

Yhdessä vanhempien kanssa teemme keväällä päätöksen siitä, jatkavatko nykyiset poika- ja tyttöryhmät myös toiselle luokalle, vai siirtyvätkö he ennalta sovittuihin sekaryhmiin. Samoin toimimme tulevien ekaluokkalaisten kanssa. Keväällä kutsun oppilaiden vanhemmat kokoukseen, jossa avoimen keskustelun jälkeen teemme yhdessä päätöksen ryhmäjaosta.

Hankkeemme yrittää osaltaan vastata ongelmaan, joka on ilmeinen. Pojat ovat menestyneet aikaisempina vuosina ja menestyvät tälläkin hetkellä koulussa valtakunnallisten arviointien mukaan tyttöjä heikommin ja me haluamme kokeilla, voitaisiinko oppimistuloksia parantaa eriyttämällä pääosa alkuopetuksesta poikaja tyttöryhmiin. Hyvin kiinnostuneita olemme myös järjestelmämme vaikutuksesta tyttöjen itsetunnon ja rohkeuden kehittymiseen.

Emme väitä vielä mitään. Haluamme kokeilla pääsevätkö pojat parempiin oppimistuloksiin, jos opetuksessa otetaan mahdollisimman tehokkaasti huomioon poikia kiinnostavat asiat ja saavatko tytöt paremman itsetunnon, kun pojat eivät vie valtaosaa opettajan ajasta. Olen kuitenkin sitä mieltä, että jako poika- ja tyttöryhmiin toimii parhaiten alkuopetuksessa, eikä ole tarkoituksenmukaista enää sen jälkeen.

Tyytyväinen olen ollut myös toimintamme aiheuttamasta runsaasta keskustelusta. On aika ruveta keskustelemaan vakavasti, miksi järjestelmässämme pojat jäävät oppimistuloksissa selvästi hopealle tyttöihin nähden tai kaipaavatko tytöt itsetunnon ja rohkeuden kehittymistä. On myös virkistävää puhua välillä vakavasti opetuksen sisällöstä rahan tai sen riittämättömyyden sijaan. Suomalainen peruskoulu on hyvä, mutta ei vielä valmis.

*”Opetus ja kasvatustulee järjestää yhteistyössä kotien ja huoltajien kanssa siten, että jokainen oppilas saa kehitystasonsa ja tarpeidensa mukaista opetusta, ohjausta ja tukea. Opetuksessa otetaan erityisesti huomioon tyttöjen ja poikien erilaiset tarpeet sekä kasvun ja kehityksen erot.”* (Perusopetuksen opetussuunnitelman perusteet 2004)

## Lähteet:

Opetushallitus (2005). Oppimistulosten arviointi, äidinkieli ja kirjallisuus sekä matematiikka 3. luokalla

Opetushallitus (2005). Peruskoululaisten kirjoitustaidot kansallisissa oppimistulosarvioinneissa vuosina 1999 – 2005. PDF – linkki: <http://www.oph.fi/page.asp?path=1,444,3784,7698,52571>

Ole Bredesen (2004). Uudet pojat ja tytöt – uusi pedagogiikka. Cappelen akademisk forlag. Suora linkki: <http://www.stm.fi/Resource.phx/vastt/tarvo/tasuk/julkaisut.htx.i1937.pdf> □

## Kaipaavatko tytöt ja pojat erilaisia virikkeitä oppiakseen paremmin?

Tytöt ja pojat eri luokille  
alkuopetuksessa

Pasi  
Rangell -06

## Taustaa

- OPH:n tutkimus (2005) kolmasluokkalaisten äidinkielen taidoista osoittaa kiistatta, että poikien osaamistasot ovat kaikilla osa-alueilla tyttöjä heikompia ja erityisesti kirjoittamisessa.
- voiko yksittäinen koulu tehdä asialle mitään?

## Tavoite

- haluamme selvittää, miten poikien oppimista voidaan paremmin tukea erityisesti äidinkielessä, mutta myös matematiikassa
- kiinnostuneita olemme myös tyttöjen itsetunnon kehittymisestä
- uskomme tyttöjen rohkaistuvan enemmän tyttöryhmässä kuin sekaryhmässä

- onko erikseen pojille ja tytöille suunnatuilla virikkeillä ja opetusmateriaaleilla merkitystä tyttöjen ja poikien matematiikan ja äidinkielen oppimistuloksiin?



## Motivointi tähtää mielenkiinnon herättämiseen kiinnostavien virikkeiden kautta

- oppimistuloksiin vaikuttaa tuntuvasti, millaisia virikkeitä oppilaille tarjotaan.
- Ekaluokkalainen ei osaa ajatella siten, että "tämä minun kannattaisi oppia, koska tulevaisuudessa tulen tätä taitoa tarvitsemaan".
- Hän oppii, jos aihe on kiinnostava tai se on kiinnostavalla tavalla esitetty.

## Käytännössä

- 1. lk:n tytöt ja pojat sijoitettu eri luokille
- 70 % oppitunneista sukupuolen mukaisissa ryhmissä
- loput tunneista sekaryhmissä
- sekaryhmät ovat samat, joihin oppilaat sijoitetaan 2. luokalla tai viimeistään 3. luokalla
- tarkoitus ei ole eristää tyttöjä ja poikia toisistaan!

- Opetusmateriaalit, eli kuvat, kertomukset, aiheet valitaan poikien kiinnostuksen mukaan ja tytöillä tyttöjen kiinnostuksen mukaan
- parempiin oppimistuloksiin pyrimme oppilaan mielenkiinnon herättämisellä -> halu oppia, koska toimintatapa (esim. toiminnallisuus), kertomus, kuvat tai aiheet kiinnostavat!

## Vältämme yleistystä

- ymmärrämme, että kaikki pojat eivät ole samanlaisia, kuten eivät tytötkään
  - Tytöt usein kaipaavat rauhallista oppimistilannetta ja saattavat kärsiä poikien "toiminnallisuuden tarpeesta" kokien sen oppimistilanteen häirintänä
  - Pojat kaipaavat usein toiminnallisuutta luokkatyöskentelyyn ja kokevat vaikeana "normaalin 45 min oppimistilanteen"

## Erilaisuuden kunnioitus?

- entä jos poikaryhmässä on herkkä poika, joka ei kaipaa toimintaa vaan kaipaa rauhallista työskentelyä?
- tai tyttöryhmässä raju tyttö, joka vähät välittää rauhallisesta työskentelystä ja kaipaa paljon toimintaa?

## Monopoli

- voiko olla mahdollista, että poika- ja tyttöryhmissä erilaisuus sallitaan helpommin, koska toisella sukupuolella ei ole "monopolia" tiettyyn käyttäytymiseen

Vaatii varmaan selityksen...

## Vanhemmat

- keväällä järjestettiin tuleville ekaluokkalaisten vanhemmille vanhempainilta hankkeestamme
- vanhemmat näyttivät "vihreää valoa"
- vanhempien mielipidettä seurataan neljä kertaa vuodessa -> tulokset ensimmäisestä tiedustelusta

- seuranta
- arviointi

## Haluamme siis

- etsiä keinoja huomioida paremmin tyttöjen ja poikien erilaisia tarpeita oppimistilanteissa, erityisesti äidinkielessä ja matematiikassa.
- auttaa tyttöjä ja poikia heidän suuressa elämän muutoksessaan, koulun aloittamisessa
- tehostaa oppimista

## Opettajalle

Uskalla onnistua.

Uskalla epäonnistua.

Kehittyäkseen ihminen tarvitsee molempia.

Molemmat vaativat rohkeutta.

Uskalla.

Teoksesta *Luovuuden lumous*

Jussi T. Koski ja Tommy Tabermann

## Attachments

### Appendix 7. Yhdessä ja erikseen - eri luokilta samalla viivalle

## Yhdessä ja erikseen – eri luokilta samalle viivalle

Tyttöjen ja poikien opetus  
erillisissä ryhmissä

Rangell -07

## Taustaa omalle ajattelulle ja koulumme kokeilulle

- 3. luokkalaisten oppimistulosten arviointi: poikien oppimisen taso selvästi tyttöjä heikompi erityisesti kirjoittamisessa
- tytöt saivat 68 % ja pojat 50 % maksimipisteistä
- lisäksi mitattiin lukutaitoa ja aakkostamis- sekä tavuttamiskykyä sekä matematiikan osa-alueita

*Opetushallitus (2005). Oppimistulosten arviointi. Äidinkieli ja kirjallisuus sekä matematiikka 3. luokalla.*

## Muita tutkimuksia

- Kirjoitustaidon taso 6. luokalla keväällä 2000 (sivu 16):

*”Opetusryhmän koolla, perusopetuksen 1-6. luokkien äidinkielen kokonaistuntimäärällä tai 6. luokan äidinkielen tuntimäärällä ei ollut yhteyttä saavutettuihin tuloksiin. Alueelliset erot jäivät pieniksi, mutta tyttöjen ja poikien koetulosten erot arvioitiin erittäin suuriksi.”*

Opetushallitus (2005). Peruskoululaisten kirjoitustaidot kansallisissa oppimistulosarvioinneissa vuosina 1999 – 2005.

- Kirjoitustehtävät 2005 (peruskoulun päättövaiheen opiskelijat, s. 12-13):

*”Tyttöjen kirjoitustaidon taso arvioitiin 23 prosenttisyksikköä poikien tasoa korkeammaksi. Tulos on samansuuntainen kuin aikaisemmin 9. luokan oppilaille järjestetyissä arvioinneissa, joissa tyttöjen ja poikien kirjoitustaitojen suuret erot ovat tulleet näkyville.”*

## Mistä poikien heikommat oppimistulokset johtuvat?

- oppimiskyvyssä ei ole eroja, mutta tavassa oppia on
- kyse motivaatiosta, halusta ja innosta oppia?
- opetusmenetelmät sopivampia tytöille?
- "tuntikulttuuri" sopii paremmin tytöille?

## Olkahisen koulun kokeilu

- haluamme etsiä keinoja, miten poikien oppimista voidaan paremmin tukea erityisesti äidinkielessä, mutta myös matematiikassa
- kiinnostuneita olemme myös tyttöjen itsetunnon ja rohkeuden kehittämisestä
- uskomme tyttöjen rohkaistuvan enemmän tyttöryhmässä kuin sekaryhmässä





- onko erikseen pojille ja tytöille suunnatuilla virikkeillä ja opetusmateriaaleilla merkitystä tyttöjen ja poikien matematiikan ja äidinkielen oppimistuloksiin?

- oppimistuloksiin vaikuttaa tuntuvasti, millaisia virikkeitä oppilaille tarjotaan ja kuinka motivoiva ympäristö on.
- ekaluokkalainen ei osaa ajatella siten, että "tämä minun kannattaisi oppia, koska tulevaisuudessa tulen tätä taitoa tarvitsemaan".
- hän oppii, jos aihe on kiinnostava tai se on kiinnostavalla tavalla esitetty.

## Kuluneen vuoden aikana

- lupa vanhemmilta ennen koulun alkua
- 1. lk:n tytöt ja pojat sijoitettu eri luokille
- 70 % oppitunneista sukupuolen mukaisissa ryhmissä
- loput tunneista sekaryhmissä
- sekaryhmät ovat samat, joihin oppilaat sijoitetaan 2. luokalla tai viimeistään 3. luokalla
- tarkoitus ei ole eristää tyttöjä ja poikia toisistaan!

- parempiin oppimistuloksiin pyrimme mm. oppilaan mielenkiinnon herättämisellä opittavaa asiaa kohtaan
- halu oppia, koska toimintatapa (esim. toiminnallisuus), kertomus, kuvat tai aiheet herättävät luontaisen kiinnostumisen!

## Ei voi yleistää, mutta...

- tytöt usein kaipaavat rauhallista oppimistilannetta ja saattavat kärsiä poikien "toiminnallisuuden tarpeesta" kokien sen oppimistilanteen häirintänä
- pojat kaipaavat usein toiminnallisuutta luokkatyöskentelyyn ja kokevat vaikeana "normaalin 45 min oppimistilanteen"

## Herkkä poika / raju tyttö

- entä jos poikaryhmässä on herkkä poika, joka ei kaippaa toimintaa vaan kaippaa rauhallista työskentelyä?
- tai tyttöryhmässä raju tyttö, joka vähät välittää rauhallisesta työskentelystä ja kaippaa paljon toimintaa?
- monopoli tietynlaiseen käyttäytymiseen?

## Toimintamme tasa-arvon vastaista?

- onko tasa-arvon mukaista:
  - tytöiltä ja pojilta vaaditaan samanlaista oppimistapaa?
  - pojat saavat opettajan huomiosta 80 %
  - erityisopetuksen piirissä olevista oppilaista 70 % on poikia?
- tasa-arvoa olisi se, että pojat saavuttaisivat yhtä hyviä tuloksia kuin tytöt

## Pojista Tarzaneita?

- tarkoituksemme ei ole ohjata poikia kohti poikamaista käyttäytymistä



## Tytöistä prinsessoja?

- ...eikä tyttöjä kohti tyttömäistä käyttäytymistä
- vaan antaa ryhmässä tilaa kasvaa molempia sukupuolia kunnioittavaksi oppijaksi.



## Arviointi ja tulokset



Tutkija kertoo ohjeita luokalle

- vanhempien mielipide
- oma arviointi ja mutu - tuntuma
- ulkoinen arviointi
- runsas keskustelu / julkisuus
- entä jatko?

## Ulkoinen arviointi

- kolme gradun tekijää + akatemiatutkija
- vertailuryhmä
- miten tutkimus tehtiin?
- mitä tutkittiin?
  - äidinkielen ja matematiikan taitoja, motivaatiota oppiaineisiin ja käsityksiä omasta oppimisesta

## Tuloksia

- opettajien mielipide ja oma arvio
- taidot samalla tasolla kuin vertailuryhmällä
- Olkahisen oppilaat kiinnostuneempia matematiikasta kuin vert.ryhmä
- yl ei kiinnosta oppilaitamme yhtä paljon kuin vert.ryhmää

- äidinkielessä innostus samanlaista
  - tytöt kaikissa kouluissa kiinnostuneempia kuin pojat
- pojat halukkaampia ottamaan haasteita vastaan kuin vert.ryhmä
- pojat kokevat saavansa enemmän tukea kuin vert.ryhmän oppilaat

- verrattuna tyttöihin, Olkahisen pojat arvioivat yrittävänsä sitkeämmin loppuun asti; vastaavaa eroa vertailuryhmässä ei ole
- tutkijan mukaan erot tulevat näkyviin vasta toisella ja kolmannella luokalla

## Kaksi riskiä

- tytöt

- arvio itsestään muuttuu todellisuutta kielteisemmäksi hyvin menestyvässä tyttöryhmässä?

- pojat

- ruokkivat toistensa kilpailunhalua liikaa?

## **”Syrjäytyminen voi alkaa jo pienenä, jos pojat eivät saa olla poikia.”**

- *”Nuorten miesten elämästä ei tule liian hurjaa, jos poikien ja tyttöjen erot huomioidaan jo lapsina. Yhtenä vaihtoehtona Sinkkonen pitää kouluaineiden eriyttämistä. Esim. äidinkieltä voitaisiin opettaa erikseen tyttöjen ja poikien ryhmissä, jolloin tyttöjen ei tarvitse filmata pojille ja pojat pystyisivät tuomaan esille herkimpiä puoliaan sekä keskustelemaan asioista järkevästi.”*
- *Lastenpsykiatri Jari Sinkkosen haastattelu. Dialogi 7/2006, sivu 25.*





Tutkimustilanteessa testin tekoa

- *"Opetus ja kasvatus tulee järjestää yhteistyössä kotien ja huoltajien kanssa siten, että jokainen oppilas saa kehitystasonsa ja tarpeidensa mukaista opetusta, ohjausta ja tukea. Opetuksessa otetaan erityisesti huomioon tyttöjen ja poikien erilaiset tarpeet sekä kasvun ja kehityksen erot."*  
Perusopetuksen opetussuunnitelman perusteet 2004

- "On kumma miten vähän saa aikaan, jos vain lakkaa yrittämästä."  
Paula 8v.

## Attachments

### Appendix 8. Opettaja.tv Programs where Principal Rangell was a guest

Opettaja.tv Programs where Principal Rangell was a guest. These may still be watched on the Internet using these addresses.

[http://opettajatv.yle.fi/tvohjelmat?show=2&id=7548&p\\_id=E0259912&f=3&kriteeri=1&sort=1](http://opettajatv.yle.fi/tvohjelmat?show=2&id=7548&p_id=E0259912&f=3&kriteeri=1&sort=1)

#### Studio: Tyttöjen ja poikien opetus

Studiassa pohditaan, pitääkö tyttöjä ja poikia opettaa eri tavalla. Opetussuunnitelma vaatii ottamaan poikien ja tyttöjen erot huomioon opetuksessa. Mitä se tarkoittaa ja miten se onnistuu käytännössä? Studiovieraina psykologian professori Liisa Keltikangas-Järvinen ja rehtori Pasi Rangell.

Pituus: 16:23 min

Avainsanat: opettaja.tv, ytimessä, studio, keskustelu, oppilaat, opetussuunnitelmat, sukupuolierot, oppimistyyli, arvostelu

Ensimmäinen lähetyksen päivä: 17.10.2007.

[http://opettajatv.yle.fi/tvohjelmat?show=2&id=13136&p\\_id=E0285144&f=3&kriteeri=1&sort=1](http://opettajatv.yle.fi/tvohjelmat?show=2&id=13136&p_id=E0285144&f=3&kriteeri=1&sort=1)

#### Studio: Tytöt ja pojat

Kohdellaanko tyttöjä ja poikia koulussa samalla lailla? Vaaditaanko tytöiltä ja pojilta samoja asioita? Mitä vaikutusta on sillä, että enemmistö opettajista on naisia? Aiheesta keskustelemassa Arno Kotron johdolla kasvatustieteen professori Elina Lahelma ja rehtori Pasi Rangell.

Pituus: 20:00 min

Avainsanat: Opettaja.tv, koulunkäynti, sukupuolierot

Ensimmäinen lähetyksen päivä: 25.11.2008.