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What about the boys in school?
Exploring the underachievement of boys in compulsory schools

Hur blir det med pojkarna i skolan?
Att utforska pojkars underpresterande i grundskolan

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Lärarexamen 270 hp
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Abstract

The underachievement of boys in school seems to be the general norm in many countries. Many studies have tried to find the key to this problem; still, no one seems to have found it. Studies about brain research, boys’ attitudes or motivation are trying to find the final solution and the appropriate strategies to address the problem. This degree project has chosen to explore if single-sex classrooms can enhance boys’ achievement in the language classrooms. Many scholars seem to be convinced that single-sex teaching can be the solution of the underachievement of the male students in compulsory schools. However the findings of this degree project show that more work must be done in this field to accept single-sex teaching as the solution to close the gender gap. Many recent articles, books and documents about the actual topic have been reviewed to give some light to this degree project.

Keywords: Gender differences, attitudes, underachievement, girls and boys, single-sex teaching
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1. Introduction

Schools are places where almost everybody has experienced the best and the worst times of their lives. Many of us remember the best and the worst teacher we have ever had during our school time. When we are children, we all think that everyone has the same opportunities, advantages and disadvantages as ourselves; this is not the case. No one tells us that the probabilities of being successful in school depend on factors, such as socioeconomics, parental involvement in school or gender. It is only when we reflect back on our educational needs that we realize that every child is different. Some learn faster than others, some need peace and quiet to learn.

While working as a teacher, I became very interested in the problem of boys’ bad attitudes towards school. I observed that some teachers tended to focus more on the student’s behavior rather than on the subjects they were teaching. I recall that the teachers’ attention and efforts were, in a way, directed away from the girls who were trying to make the best of their situation. This is my own generalization based on examples from my own experiences in the classroom and observations. I have also seen examples of classrooms where boys were the ambitious ones and girls were the low achievers. However, I think the general case, not only in Sweden but in many other countries, is that girls are outperforming boys in school.

Another observation that I have made, is that many teachers do not know how to act in situations where boys dominate during their lesson times. Even though teachers aim to treat their students equally, they inevitably treat them differently depending on their gender. As a result of this, many boys feel that they are discriminated against by their teachers, and that is the reason why they achieve lower grades than the girls.

In the article “Are boys discriminated in Swedish high schools?” (Hinnerich, Höglin, & Johannesson, 2011) the authors found no evidence to support this theory. The only reason which male students failed or obtained poorer results than their female colleagues were their own low performance in the tests they had carried out.
In response to this situation, the topic of single sex classrooms is increasingly current, since many scholars see this as a possible solution to closing the gender gap. Many studies are currently being carried out to explore whether having single sex classes could help boys to achieve better grades or not. Therefore, the focus of this paper is to explore and evaluate the advantages and disadvantages of having single sex classrooms. As well as the potential that single sex classrooms may have on enhancing the performance and attainment of boys in language lessons.
1. Purpose and research questions

As previously mentioned, the problem is what we teachers do about boys’ attitudes, low grades and bad behaviors, as well as which factors are the ones forcing the male students into this.

In this paper I study, discuss and identify different factors that can be attributed to the differences in grades and attitudes between girls and boys in class. This paper considers theories on brain development, differences in gender learning performance and social aspects that may be involved in the underachievement of boys.

Different social aspects that influence the academic achievement of both boys and girls, and how these are responsible for the differential achievement of both genders in school are explored in this paper.

This point of departure for this degree project is based on statistics and studies that show the reality of the underachievement of boys in school. The Swedish National agency for Education home page provides statistics that show the underachievement of the boys in the Swedish school system (www.skolverket.se).

The purpose of this paper is to understand the differences that lead girls and boys to different achievements in school, and to evaluate the learning potential of the single sex classroom, with a special focus on the language classroom, as a possible solution to the gender gap in this subject. A greater understanding of this topic may help teachers to treat girls and boys in a much better way during their school time, and in particular in the language classroom, so our male students may change their attitudes towards school, and consequently achieve better grades. Therefore, these are the research questions guiding this paper:

1. Do girls and boys learn in a different ways? How do certain social aspects affect the students’ school performance?
2. How can research into education and gender provide a basis for evaluating the language learning potential of single-sex classrooms?
I chose to write a research synthesis where I review and discuss a selection of recent articles and books that are of relevance for this study. By generating an understanding for these questions, knowledge may be spread and perhaps help me and other teachers give a much better and more equal education to our future students. Norris and Ortega (2006) say that a research synthesis pursues systematic (i.e., exhaustive, trustworthy, and replicable) understandings of the state of knowledge that has been accumulated about a given problem across primary research studies. Its foremost purpose is to integrate available research evidence, enabling both patterns and inconsistencies (in both findings and methods) to be identified with precision. Norris and Ortega (2006) also mention that rigorous syntheses enable the research community to compare and combine findings across individual studies, to authoritatively answer particular research questions, and to identify gaps in research methodologies. However, the authors say, systematic research synthesis is not easy, and it depends as much on the quality and availability of good primary research as it does on the capabilities of secondary researchers.

I make use of articles in this synthesizing research found in pedagogical databases such as ERC, Education Research Complete, ERIC via EBSCO, ERIC via ProQuest, Google Scholar and ScienceDirect.com. I have searched for phrases such as boys and girls in school, gender differences and single sex teaching to find articles and books that are relevant for my research. I also made use of the National Swedish Agency of Education home page (skolverket.se) which provides me with useful information about the actual achievements and grades of boys and girls in compulsory school in Sweden.
A relevant source to consider is the book published by the OECD (The Organisation for Economic Co-operation and Development) about the Programme for International Student Assessment (PISA) called “Equally prepared for life? How 15 year old boys and girls perform in school”. This is an international study which aims to evaluate educational systems worldwide by testing the skills and knowledge of 15-year-old students. More than 70 countries and economies have participated in the assessment. The study takes into consideration the differences of boys and girls in reading skills, Maths, Science and problem solving. Since my paper is focused on the language classroom, I review only the reading part of the study.

Another important source is the book “Boys and girls learn differently! A guide for teachers and parents” by Michael Gurian (2011). I make use of some parts of the book in this synthesizing research. The book focuses on brain-based research to explore why boys and girls learn differently and how teachers and parents can use that information to create the best learning environment for both boys and girls. Thus, brain research is a consistent part of this degree project.

The perspectives of boys’ masculinity are very stereotypical and that is why two different approaches are included in this paper: the one from Skelton and Francis (2011) and the ones by Houtte (2004) and Dalley-Trim (2007), since the purpose of this paper is to be as objective as possible and not to just give a stereotypical image of the boys.

My degree project approaches different factors that may be the cause of the differences in attitudes and grades between girls and boys in school. I also realize that there are other factors such as ethnicity, socio-economics or parental involvement that may also be responsible for the behavior of the students in school, and that have not been studied in this paper. I answer the research questions in the different sections of my paper where I analyze these different factors:

- Ways of learning (the brain, from a gender perspective)

- Social aspects (attitudes, society’s perception, educational expectations, teachers’ perception)

- Single-sex classrooms (What is it? Why? Pros and cons)
4. Gender differences in student’s academic performance in school

Before starting with the theories that are used to explore the underachievement of boys, we must consider the statistics, to show that the underachievement of boys is not just a myth but a reality that we teachers must take into consideration. In this section, I present two tables with statistics from the Swedish National agency for Education home page, not just about how boys are doing in general at school but how they are doing in the English classroom.

1) Students who did not reach the goals in the ninth grade between the years 2006 until 2010 in the subjects of English, Mathematics and Swedish:

<table>
<thead>
<tr>
<th>Läsår</th>
<th>Elever som ej nått målen i ämnena svenska, matematik och engelska</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Läsår Antal (%)</td>
</tr>
<tr>
<td>Bakgrund</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Kommun</td>
</tr>
<tr>
<td></td>
<td>Fristående 2)</td>
</tr>
<tr>
<td></td>
<td>Elever med svensk bakgr. utl. bakgr.</td>
</tr>
<tr>
<td></td>
<td>2010/11</td>
</tr>
</tbody>
</table>

(Retrieve from: www.skolverket.se)

In the table above (1), we can see that every year there are more boys than girls not reaching the goals in the ninth grade in the subject of English and Swedish. We can also see that boys are better at reaching the goals in Maths than the girls.
2) Students who left compulsory school without a final grade between the years 2006-2011:

<table>
<thead>
<tr>
<th>Årskurs</th>
<th>Antal Samtliga</th>
<th>Antal Flickor</th>
<th>Andel (%)</th>
<th>Antal Pojkar</th>
<th>Andel (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Årskurs 9</td>
<td>1 379</td>
<td>599</td>
<td>43,4</td>
<td>780</td>
<td>56,6</td>
</tr>
<tr>
<td>Årskurs 8</td>
<td>194</td>
<td>69</td>
<td>35,6</td>
<td>125</td>
<td>64,4</td>
</tr>
<tr>
<td>Årskurs 7</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Årskurs 9</td>
<td>1 358</td>
<td>582</td>
<td>42,9</td>
<td>776</td>
<td>57,1</td>
</tr>
<tr>
<td>Årskurs 8</td>
<td>123</td>
<td>47</td>
<td>38,2</td>
<td>76</td>
<td>61,8</td>
</tr>
<tr>
<td>Årskurs 7</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Årskurs 9</td>
<td>1 379</td>
<td>554</td>
<td>40,2</td>
<td>825</td>
<td>59,8</td>
</tr>
<tr>
<td>Årskurs 8</td>
<td>141</td>
<td>53</td>
<td>37,6</td>
<td>88</td>
<td>62,4</td>
</tr>
<tr>
<td>Årskurs 7</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Årskurs 9</td>
<td>1 225</td>
<td>519</td>
<td>42,4</td>
<td>706</td>
<td>57,6</td>
</tr>
<tr>
<td>Årskurs 8</td>
<td>182</td>
<td>67</td>
<td>36,8</td>
<td>115</td>
<td>63,2</td>
</tr>
<tr>
<td>Årskurs 7</td>
<td>30</td>
<td>17</td>
<td>56,7</td>
<td>13</td>
<td>43,3</td>
</tr>
<tr>
<td>Årskurs 9</td>
<td>1 075</td>
<td>427</td>
<td>39,7</td>
<td>648</td>
<td>60,3</td>
</tr>
<tr>
<td>Årskurs 8</td>
<td>145</td>
<td>46</td>
<td>31,7</td>
<td>99</td>
<td>68,3</td>
</tr>
<tr>
<td>Årskurs 7</td>
<td>13</td>
<td>6</td>
<td>46,2</td>
<td>7</td>
<td>53,8</td>
</tr>
</tbody>
</table>

(Retrieve from: [www.skolverket.se](http://www.skolverket.se))

In the table above (2), we can see that every year, there are more boys leaving the Swedish compulsory school without a final grade than girls. The Swedish statistics are no different from those of other countries that have studied the performance of their boys and girls in school; the girls outperform boys in many subjects such as English, and Swedish but the boys are still stronger in Mathematics.

PISA 2000 (an international study which aims to evaluate educational systems worldwide by testing the skills and knowledge of 15-year-old students) focused on reading skills and studied gender differences in great detail. The report claimed that
females outperform males in reading and in all of its subcomponents. This also explains
the performance gap for which females showed a lot more interest than males in reading
(OECD, 2009).

The report divides the gender differences in reading skills into four sections:

The first section is students’ performance. The report says that there were some
large gender differences observed in both student performance and student attitudes.
The distribution of performance showed strong contrasts between females and males. In
the PISA 2000 assessment 11.9% of all females performed at the highest level of
proficiency (level 5) compared with 7.2% of all males. In all OECD countries males
were more likely than females to be among the lowest-performing students. At level 1
and below on the combined reading literacy scale, the ratio of males to females ranged
from 1.3 to 3.5 (OECD, 2009).

The second section is about trends in gender differences in reading, between
PISA 2000 and PISA 2006. The report examines whether there have been significant
changes between the reports from the year 2000 and the year 2006. This one affirms that
in general the performance in reading has declined in a minimum way. In terms of the
distribution of performance, the proportions of males and females performing at the
highest level in 2006 (6% of males and 11% of females) were very similar to those in
2000 (7% of males and 12% of females). For the students who were at the lower
proficiency levels (i.e. level 1 and below) in 2006, 26% were males and 14% were
females, compared to the results of PISA 2000, 22% were males and 13% were females
(OECD, 2009).

The third section is student interest and engagement in reading: PISA 2000
found that students’ interest and engagement was associated with a significant portion
of the gender differences in performance. In all countries the boys felt less interest in
reading than the girls. However, about half of the students surveyed in PISA 2000 were
positive about reading with 48% of them agreeing or agreeing somewhat that reading is
fun and that they would not want to give it up. In this section the students were also
asked about their reading habits. These were the results: 46% of the boys read only if
they had to, compared with 26% of the girls. In addition, 58% of males read only to
obtain the information that they needed as opposed to 33% of females. Similarly, 25%
of the males reported that reading is one of their favorite hobbies, compared with 45%
of the females. Males also tend to spend much less time reading than females, with 30%
of them, on average, reporting that they read for enjoyment for more than 30 minutes each day, compared to 45% of females (OECD, 2009).

The fourth section of the report is called “Other gender differences found in PISA 2000”: The report also showed differences between boys and girls in their preferred ways of learning. The most important findings were that when approaching a learning task, the girls were better at learning how to solve the problem while the boys were better at processing information. When it comes to motivation, in most countries females showed higher reading interest and claimed more effort and persistence; the boys, on the other hand, expressed more interest in Mathematics. Boys perceive themselves as generally confident in their Mathematical abilities the same way did girls in their verbal abilities, but an advantage was found for the boys. They feel confident in being able to succeed in tasks, even when they found them difficult. The last difference found was the different preferences in the way boys and girls learn with their peers; this means that in most countries males were more likely than females to be positive about competitive learning situations. In about half of the countries, females were more likely than males to say that they like learning co-operatively; in the rest there was no difference, except in Korea where males favored co-operative learning more (OECD, 2009).

These facts about the achievements of boys in compulsory school show us that the boys are underperforming in comparison to girls. Reading seems to be a clear element were girls are outperforming boys. The next section of this degree paper addresses certain factors that may be the responsible of such underachievement.
5. Different Factors

This section of the degree project approaches the differences between girls and boys that influence the male students’ negative views about school. Such factors include the following: ways of learning, a gender perspective, and social aspects. The idea is to study and review different research on the differences between the two genders, in order to provide a basis for the evaluation of the potential that single-sex classrooms may have for language learning.

5.1 Ways of learning, a gender perspective

The Swedish curriculum for compulsory school says that teaching should be adapted to each pupil’s circumstances and needs. It should promote the pupils’ further learning and acquisition of knowledge based on pupils’ backgrounds, earlier experience, language and knowledge. (Skolverket, 2011, p.10) However, many teachers treat girls and boys the same way without thinking about the differences that make each individual special and how they could adapt their teaching to each individual so they would learn as productively as possible. One of the factors that makes girls and boys different is brain development. Gurian’s (2011) book “Boys and girls learn differently! A guide for teachers and parents” reinforce this point of view. Gurian (2011) complains that our children are attending to schools that are not prepared to deal with who these children really are. He means that most teachers are not trained to understand the differences between the girls’ and boys’ brains, therefore, teachers face difficulties on a daily basis when dealing with their male and female students. Still, Gurian (2011) does not want to stereotype all problems into male and female issues. He means that we teachers must treat each child as an individual, and this knowledge must be just added to our general wisdom.
An article called “How Are the Boys Doing? The New Gender Gap: Social, Psychological, Neuro-biological, and Educational Perspectives” by Gunzelmann and Connell (2006) discusses the basic psychological and biological differences between boys and girls; it also takes into account psychological, emotional and brain-based differences. Gunzelmann and Connell (2006) say that normally teachers have taught boys to read and write in a manner adapted to their level of development, understanding that boys would catch up developmentally at around the fourth grade. The authors also say that this is no longer the case since the focus on high-stakes state and federal tests give a big advantage to the brain strengths of girls, and put boys under bigger pressure which makes the boys see school as a girl thing; now the boys “instead of catching up, they are giving up!” (Gunzelmann & Connell, 2006, p.99)

Thus, there is no doubt that the girls and the boys develop both mentally and physically in many different ways and these differences might contribute to the gender gap in education.

5.1.2 Brain differences

Gurian (2011) explains that the brain is divided into the left and the right hemispheres. The left is primarily associated with verbal skills, speaking, reading and writing, and the right is primarily associated with spatial skills such as measuring, perceiving direction, and working with blocks or other subjects.

Gurian (2011) also divides the differences between the male and the female brain into five different sections: developmental and structural differences, chemical differences, hormonal differences, functional differences and differences in processing emotions. This section summarizes these different factors since it is the best manner to show that there are physical differences between male and females that make us behave differently from each other.

First are developmental and structural differences: one of the differences between the male’s and the female’s brain that Gurian (2011) points out in his book is the factor that makes males and females mature. This is called myelination. Myelin allows electrical impulses to travel down a nerve quickly and efficiently. Myelination
develops the brain until physical maturity is reached. In females the brain tends to mature in the early twenties; in males this occurs later, closer to the age of thirty.

Another structural difference (Gurian, 2011) is the one called corpus callosum; this is the bundle of nerves that connects the right and the left hemispheres. In females it tends to be large (meaning generally having more neural connections) than in males. There is more (and quicker) development in females than males in the prefrontal lobes, where affect regulation finds its executive decision making, and the occipital lobes, where sensory processing often occurs. This is translated by girls hearing, smelling and absorbing more information than boys. Girls are less impulsive and less likely to take moral risks than boys. At the same time boys are generally more likely to show physical aggression. Girls are more open to verbal communication and are more able to verbalize their feelings while boys tend to have more development in certain areas of the brain which allow them to have better spatial abilities.

Second are chemical differences: there are some chemical differences also in the male and the female’s brain that also make us react to things in different ways. In Gurian (2011) we can read that one of these chemical reactions is called serotonin or the chemical reaction of “feel good”. Males are more aggressive when the effect of serotonin is low. Other chemical reaction such as oxytocin which is more stimulated in females makes them able to react with immediate empathy to others’ pain and needs.

Third are hormonal differences: hormones are one of the factors that might have the most potential to influence the differences between male and females. Females are dominated by estrogen and progesterone while males are dominated by testosterone. Gurian (2011) points out that progesterone is the female growth hormone and also a bonding hormone while testosterone is the male growth hormone and the sex-drive and aggression hormone. The levels of these different hormones present in individuals, is the one that decides whether a boy is more aggressive or more sensitive than others. At the same time when the level of progesterone in girls is high this may influence in girls getting higher scores in a standardized and in-class tests while boys may perform better on spatial exams, like math but worst in verbal test when their testosterone level is high.

Fourth are functional differences: This is the brain functionality and how the different parts of the brain react in different situations; for example, boys tend to use the right hemisphere more (primarily associated with spatial skills such as measuring, perceiving direction and working with blocks and other objects) while girls tend to use
the left (primarily associated with verbal skills such as speaking, reading, writing). The author also mentions that girls tend to process emotive information in their upper brain, where complex thoughts occur while boys tend to process this kind of information from the limbic system to the brain stem, where fight-or-flight responses are stored. That is why a girl’s response to a situation normally is more complex than a boy’s. The male brain gets overwhelmed faster when processing too much information than the female. Gurian (2011) also mentions that two areas of greater functioning in the female brain are the memory and the sensory intake, and the spatial tasks and abstract reasoning in the male.

Fifth are differences in processing emotion: Brain-based research has shown that processing emotions is one of the most important parts to understand the differences between girls’ and boys’ brains. Gurian (2011) says that this area is where boys are more at risk for missed learning and processing opportunities. Girls are able to process quicker emotive information while it will take longer for a boy to process emotively the same amount of information. The author provides us with a good example, a boy who had a problem at home in the morning before going to school will go to school with a higher cortisol level (stress hormone) than his sister. The boy may not be able to process the problem as quickly as his sister; as a result of this, he may not be able to learn for much of the morning. His sister, on the other hand, will be able to process the stress faster and even will be able to talk about it, so that she can learn efficiently the very same morning. Therefore, the male will be the fragile sex in this situation since he is not able to guide and process his emotions and this will affect his ability to learn in a proper way that day. However, the author also wants to point out that both sexes must be equally understood and protected emotionally and that we should re-think the thought of males being the strong ones. Maybe in this case the tough one is the girl while the boy is simply a victim of his own brain.

The OECD talks also about the structure of the brain, and the differences that can play a role in the gender gap academic achievements. The report says that there has been much interest in investigating potential links between the structure of the brain and differing educational outcomes for boys and girls. The OECD report affirms that there are functional and morphological differences between the male and female brain, and that the male brain is larger, but when it comes to language, the relevant areas of the brain are more strongly activated in females. The OECD also warns us that determining
the importance of these differences in structure is extremely difficult. It also assures that there is not a current study that has shown gender-specific processes involved in building up the networks in the brain during learning (OECD, 2009).

To sum up, our brains seem to play a big part in the development of our personality and the way we behave in every situation. The brain is the most complex organ in the human body, and as the OECD explains, there are many functions and parts in our brains totally unknown for us. We must also assume that not all the female brains and the male brains work in the same way; there are points of convergence but our brains are responsible for our personalities and the way we differ from each other. Therefore, if we relate this to the first research question (Do girls and boys learn in a different ways?) we can say that the boys’ and girls’ brain are design in different ways; furthermore, the chemical reactions and hormones working on them are in a great scale responsible for differences on the academic achievements but there are not the only factors that make girls and boys to learn differently. The next section addresses the next research question, “How do certain social aspects affect the students’ school performance?”

5.2 Social aspects

Houtte (2004) explains in an article called “Why Boys Achieve Less at School than Girls: The Difference between Boys' and Girls' Academic Culture” that for most boys and girls one of the most important things during puberty is to be cool or popular; however, the meaning of being popular or cool differs between boys and girls. Boys tend not to include study achievements as something that could increase their social image; on the other hand, girls are accepted among peers as both cool and hard workers. The above mentioned can be placed in the frame of gender-specific youth culture. As Houttes (2004) explains, both girls and boys try to seek the company of people of approximately the same age and the same sex. For instance, boys are more worried about their image in their group than girls are; girls are more interested in intimate relationships than boys. Thus, thinking about the differences between girls’ and
boys’ perception of “being cool” it can be said that the boys’ culture is less study oriented than the girls’.

To be able to understand the problem of the underachievement of boys during their school time, it is important to have a look at the social aspects that may decide whether they will be successful in their studies or not. To delve deeper into this topic I analyze the girls’ and boys’ attitudes towards compulsory school and English, the society’s perception about boys and the educational expectations that both girls and boys may have.

5.2.1. Attitudes

The different attitudes towards school or towards a specific subject, in this case English, may decide whether a student will accomplish good achievements in his/her school curricula or not. That is why research into boys’ and girls’ attitudes may be one of the keys to understanding why boys underachieve in school.

In an article called “Impact of Attitudes of Peers on Language Achievement: Gender Differences” the authors (Van De Gaer, Pustjens & Van Damme, 2007) examine not only the gender differences in attitudes toward schooling but towards their fellow students. The article also pays specific attention to the attitudes that boys have towards language lessons. The findings of this article revealed that all boys who had a negative school view were also underachievers in the language classroom. The authors also discovered that boys were more influenced by their peers in class than girls were. The article tests quantitatively whether there is an association between boys’ underachievement in language learning and their antischool-related attitudes. Van De Gaer et al (2007) discovered that the gender gap in language achievement was associated with school related attitudes in three ways. Firstly, they discovered that girls had a more positive attitude toward schooling than boys. Secondly, the gender gap in language achievement was smaller when boys and girls had positive attitudes toward schooling. Thirdly, the results showed that the attitudes of peers in classes had a stronger effect on the language achievement of boys than of girls. The authors also found that the principal factors influencing boys’ language achievement were attributed to a negative attitude towards school and also the stronger impact of school-related
attitudes of peers in classes. Van De Gaer et al (2007) also ensure that boys do not achieve lower scores in languages when they were attentive in the classroom; the authors affirm that this should have important implications for educational practice and that intervention programs that focus on giving a solution to the underachievement of boys should emphasize their attitudes toward schooling.

In another article called “Gender differences in reading ability and attitudes: examining where these differences lie” by Logan and Johnston (2009), in which the main purpose was to investigate gender differences in the relationship between reading ability, the frequency of reading, attitudes and beliefs relating to reading and school, children’s attitudes towards reading and school were significantly associated with their reading skills. When analysis was carried out separately for boys and girls, only boys’ attitudes continued to be significantly associated with their level of reading skill; girls showed no such association. This study also suggested that boys need to be successful at something in order to enjoy it. The authors also say that boys’ attitudes toward reading may have influenced the amount of effort they put into the reading assessment, therefore, this would affect their results. Logan and Johnston (2009) also point out that the key to gender differences may be found in the associations between many factors. Indeed, this study found that gender differences were bigger in the association between factors, rather than exclusively in the factors themselves.

According to OECD (2009), the report “Equally prepared for life? How 15 year old boys and girls perform in school” male students need to be helped towards a more positive approach to reading, which requires them to see it as a useful, profitable and an enjoyable activity.

Reading short texts and novels is vital not just for the language classroom but also for many other school subjects. We must also think how intrinsically related reading, the language classroom and the attitudes towards school are, and that these factors may be the key contributors to understanding the underachievement of boys. A greater understanding can provided teachers with a better platform for meeting boys’ needs.
5.2.2 Society’s perception

The boys’ attitudes towards school are intrinsically related to the perception that society has in general about how to be or behave as a “real boy” (Skelton & Francis, 2011, p.457). Peer pressure can make a boy become an underachiever. One of the reasons for this is the pressure that our modern society puts on our students. Boys should be tough; they should not cry and they should not show feelings that can demonstrate that they are fragile. However, the construction of the male identity does not need to be the “macho” ideal; we can read in an article called “Successful Boys and Literacy: Are "Literate Boys" Challenging or Repackaging Hegemonic Masculinity?” written by Skelton and Francis (2011), that the statement of boys being underachievers is just a generalization and we cannot forget that many boys are being successful in school. This study explores the connections between high achievement, gender and popularity in order to analyze if it is possible to be “clever and popular” at the same time and if gender play a big role in all this. Skelton and Francis (2011) criticize brain research theories that invoke a stereotypical understanding of the masculinity; they argue that boy-friendly literature has been used for more than 15 years in Australia and this has not made any difference in closing the gender gap in that country. Furthermore, the authors mean that this type of approach lets boys down by failing to stretch and challenge them intellectually while simultaneously increasing existing gender stereotypes.

Skelton and Francis (2011) also explain why the “brain difference” theories are more popular and taken into account in different discussions about literacy. They say that if boys are not performing as well as the girls this is due to teaching methods, which have put the male students at a disadvantage to the girls. The authors also raise the questions of, whether gender differences are a consequence of biological differences, and ask why, if “girls’ brains” make literacy easy, there are more high-profile male novelists, poets, journalists, dramatists and so forth. Also, if literacy is a female skill why has the study of classical literature been an exclusively male occupation, through history?

In this article, the authors want to provide another perspective on the boys’ situations in school; they argue that there are many studies about boys’ lack of achievement in literacy but not many about how boys, who do well at literacy, construct
and successful maintain their masculinities. They also find that the most sociable students are those who are able to have a good balance between their school achievements and with their capacity of being social. Finally, Skelton and Francis (2011) make a difference between the sociable high-achieving boys, and the ones that are just high achievers. The first ones tend to have English as a favorite subject, while the other ones have English as their least favorite subject. They mean that this could reflect the ways in which communication skills underpin both the English curriculum and the sociable subjectivities facilitative of popularity.

In another article called ““The Boys” Present... Hegemonic Masculinity: A Performance of Multiple Acts” the author, Dalley-Trim (2007), examines the way in which boys try to construct their masculinity within the classroom and with their peers, focusing on the practices that these boys perform, and in particular those of gender and sexuality. Dalley-Trim (2007) focuses the study on two groups of boys who have dominant positions in their classrooms as a result of their mobilization of discourses and practices commonly associated with hegemonic masculinity. This article is a good contrast to the one by Skelton and Francis (2011) since the focus here is not on the dominance of the boys because of their ability to be social but rather the boys’ ability to engage with and play out a dominant version of masculinity. The author points out that not all boys have the same type of behavior as the ones represented in this research, but the interesting cases are the boys that demonstrate these versions of masculinity. Dalley-Trim (2007) says that this research has shown that boys use a number of different techniques in order to position themselves as a clearly identifiable heterosexual masculine subject. Some of the practices of the boys’ bodywork are: shouting and being loud, calling out and interruptive behaviors, laughing, joking, misbehaving, acting tough, acting cool, play fighting and refusing to affirm the teacher’s authority. Dalley-Trim (2007, p.203) says that this type of bodywork “serves to position boys as troublemakers and thus reinforce hegemonic discourses of masculinity”. The author states:

“As Jordan (1995, p. 77), commenting on this phenomenon asserts, ‘getting into trouble’ at school is a ‘touchstone for masculinity”
(As cited in Dalley-Trim, p. 203)

Houtte (2004) also has a very stereotypical view of the boys’ situation and blames society. He says that society has suffered a process of feminization. Therefore,
women push out men more and more, and a consequence of this is that boys in this situation feel threatened and are forced to overdo their masculinity. One example of this, the author mentions, would be opposing school.

These perspectives of boys’ masculinity are very stereotypical and that is why both views are included in this paper, the one from Skelton and Francis (2011) and the ones by Houtte (2004) and Dalley-Trim (2007). However, one must realize that the problem of the stereotypical boys exists and teachers must learn how to deal with it. As we have seen, society tries to impose on the boys the notions of masculinity, popularity, etc. and it tells the boys how to obtain these ideas: “you are a real boy if you get into trouble otherwise you are just a little girl”. Teachers must be aware of these stereotypes and teach our boys that there is nothing wrong with being a man and being successful in life and in school.

5.2.3 Educational expectations

Most schools require children to learn how to sit still, speak fluently, color between the lines, learn how to work with others, be neat and organized, learn from theories rather than a practical approach, and demonstrate what they have learnt through standardized tests; but how are all these expectations translated into reality? Are girls and boys going through a frustrated period of their lives just because they are not able to reach all these expectations? Furthermore, we can read in the article “How Are the Boys Doing? The New Gender Gap: Social, Psychological, Neuro-biological, and Educational Perspectives” by Gunzelmann and Connell (2006) that boys are having a hard time in school. On the one hand, we are less tolerant of boys: we expect them to be strong and keep their concerns to themselves—not to whine or be crybabies. Yet on the other hand, we expect boys to act the way girls do in school: to sit still, color inside the lines, and learn in the same sequence and manner as girls. The authors conclude that clearly, the emotional climate in many schools and classrooms favors girls over boys. The authors also affirm that the test-driven curriculum places boys at greater risk for failure; for instance, many boys are just not ready to learn the concepts since they develop many of the necessary skills later on. The authors agree with Brazelton and Greenspan (2000), they say that teachers must meet children’s individual needs to be able to help them to
learn and develop in a proper way; the authors even ensure that many boys are misunderstood and even misdiagnosed—Attention Deficit Disorder, Learning Disabled, Oppositional Defiant Disorder, and Conduct Disorder—when in fact many are just frustrated, poorly taught children. Years of research show that many more boys than girls are diagnosed with such disorders. (Brazelton and Greenspan (2000), as cited in Gunzelmann & Connell, 2006, p.97)

The Swedish curriculum for compulsory school (2011, p.10) says the school should actively and consciously further equal rights and opportunities for girls and boys. The way in which girls and boys are treated and assessed in school, and the demands and expectations that are placed on them, contribute to their perception of gender differences. Schools have a responsibility to counteract traditional gender patterns. They should provide scope for pupils to explore and develop their ability and their interests independently of gender affiliation.

Still, the task of the Swedish schools is to impart the more unvarying forms of knowledge that constitute the common frame of reference that everyone in society need. Pupils should be able to keep their bearings in a complex reality, where there is a vast flow of information and where the rate of change is rapid. This is the reason that study skills and methods of acquiring and using new knowledge are important. It is also necessary that pupils develop their ability to critically examine facts and relationships, and appreciate the consequences of different alternatives.

The Swedish curriculum also explains and points out that language learning, and the development of a personal identity are all closely related. By providing a wealth of opportunities for discussion, reading and writing, all pupils should be able to develop their ability to communicate and thus enhance confidence in their own language abilities. The curriculum also states that creative activities and games are essential components of active learning.

There is no doubt that the idea from the article by Gunzelmann and Connell (2006) and the text from the Swedish curriculum clash in many ways. Gunzelmann and Connell (2006) criticize both society and schools for pushing children to grow up quicker and to learn concepts earlier, while the Curriculum accepts and encourage the idea of the new society and the new forms of acquiring information. In addition the pupils must adapt to this new situation and develop abilities to be able to follow and be part of this society. In Gunzelmann and Connell (2006) the idea of boys
in school being at a disadvantage to girls, because of the boys’ ability to read, the ability of being successful verbally, and the ability to express themselves in writing in a proper manner, is lower than the ability of the girls. Furthermore, boys mature later than girls and this clashes with the idea of the Swedish Curriculum of all pupils learning languages. The curriculum also states that creative activities and games are essential components of active learning, and this may enhance the opportunities of boys to reach higher achievement in this subject.

Gunzelmann and Connell (2006) also ensure that the trend of testing everything, results in no greater knowledge, but it puts added pressure on children to measure up and to hurry their learning. Additionally, they say, the test-driven curriculum places boys at greater risk for failure: many boys are just not ready to learn the concepts since they develop many of the necessary skills later.

This brings into the question whether the Curriculum and the reality of the school are working along with each other or not. On the one hand, Gunzelmann and Connell’s view about school and how this is taken down the boys’ educational expectations, and on the other hand the Swedish Curriculum which focuses on the individual and it takes on account the gender differences rather than sending a message of inequality. It also raises the question of what teachers are doing for male students to enable them to achieve better grades. Our task is to work with the individual and to be able to see their needs, how is this possible when there are so many students? How can we have lessons that are adapted and designed for everyone? These questions can hold the answer as to how teachers can improve attainment, attitudes and expectations of our male students.

5.2.4 Teachers’ perception

Some studies suggest that the problem of the underachievement of boys can be attributed to the teachers and their relationships with their peers; others suggest that the feminization of our society and furthermore, the main presence of just female teachers has contributed boys to becoming underachievers. This section of the paper pays special attention to the perceptions that teachers may have about their male and female students,
and how a teachers’ gender may or may not play a role in influence of the low performance of the boys in school.

In the article “The Gender Gap and Classroom Interactions: Reality and rhetoric” by Younger, Warrington and Williams (1999) the authors explore how teachers support their students depending on their gender. The authors research whether boys have less positive support from their teacher during learning than girls in different school contexts. The study suggests that boys dominate student–teacher interactions; their data shows that growing numbers of teachers may be increasingly defining their ‘ideal student’ as female (p, 327). Most teachers perceive girls as better organized, with more sophisticated communication skills, more articulate, more confident and much better at individual learning than boys. Teachers in this study had greater expectations for their girl students because of the quality of their work and their interaction with others. These teachers saw many girls as self-learners, spending more time on homework and having more serious attitudes to schoolwork. In contrast, many teachers saw boys as more disordered, less motivated and with a much more negative view about school work than girls. The teachers described the boys as much noisier and disturbing, less advanced for their years, and more easily distracted than girls. The boys in general were perceived as more concerned with peer-group image. The teachers, in general, thought that the atmosphere of the classroom for teaching and learning, were more likely to be heavily influenced by boys rather than by girls.

Younger et al. (1999) results say that boys and girls are treated quite differently in many classrooms. The teacher-student interactions was mostly dominated by the boys; for instance, the boys were the most reprimanded, and they were the most involved in direct questioning by the teacher and in responding to open questions from the teacher. Many teachers thought that they did not treat their students differently depending on their sex, but the study showed that boys receive more negative attention than girls, furthermore the authors found that there was some evidence to suggest that the tolerance level of teachers was “lower to boys’ misbehavior than to that of girls and that this could lead to male disillusionment and a negative reaction to learning”. (P, 339) The observations of this study also corroborated the general students’ views that teachers respond more positively to girls’ more constructive and enquiring approach to learning.
The results of the previous article may lead to the conclusion that of course boys are achieving worse results than girls; the teachers are grading them and treating them much differently than they do with the girls. In another article called “Are boys discriminated in Swedish high schools?” by Hinnerich, Höglín and Johannesson (2011) we can see that at least this may not be the case of Sweden. The main purpose of this research is to study whether the boys’ grades are lower due to discrimination or not. The authors of this study compare blind and non-blind grading of the very same tests. They carry out such a test by randomly drawing a sample of compulsory national tests in the Swedish high school. They also explain that tests are graded blindly by teachers with no information about the student’s identity and the blind test scores are compared with the original non-blind test scores graded by the student’s own teachers. The results of this study could not prove any kind of discrimination of boys in grading in the Swedish school. However, the authors point out that the study just examined discrimination of grading and that other forms of discrimination in school can be the cause of the performance gap between girls and boys, such as teachers devoting more time to girls than boys. The authors finally discusses that since the gender gap does not seem to be caused by discrimination or differences in ability, the most reasonable explanation is that girls provide more effort in school.

Can teachers’ gender be responsible for the gender gap in education today? The article “Is the gender gap in school performance affected by the sex of the teacher?” by Holmlund and Sund (2008) investigates just that. The authors of this research, carried out in Sweden, ensure that their research results suggest a clear association between the girls’ higher grading and having female teachers; however, the study concludes that it cannot prove the hypothesis that a same-sex teacher has a positive causal impact on student academic performance in compulsory schools. Having a male or female teacher cannot explain the gender grade gap in school.

In another research called “Boys’ Underachievement: Male versus Female Teachers” by Mohd Majzub and Muhammad Rais (2010) carried out in Malaysia also showed that the sex of the teacher was not the responsible for the gender gap in school. Most teacher thought that having more male teachers at school would increase discipline among boys. Finally, the authors point out that preferring a female or a male teacher was a matter of taste.
A closer view to the topic of the teachers’ perception of their male or female student is to have a look at the language classroom. How are the boys and girls perceived by their teachers in this subject? The article “Boys into Modern Languages: An investigation of the discrepancy in attitudes and performance between boys and girls in modern languages” by Clark and Trafford (1995) investigates this subject. The study explores the differences in attitudes between boys and girls in modern languages and it also pays attention to the perception that teachers of modern language have about their male and female students. The teachers in general, in this study, mentioned that girls mature earlier than boys and that is why the girls take school work more seriously. The teachers also said that the quality of the girls’ work was better than the boys because the girls were more careful and organized. The authors also said that the teachers in modern languages are worried about the boys’ attitude of not spending time on their school work, or on their homework and that this may effect on long-term performance since the subject of modern language requires time to learn and assimilate vocabulary, structure progressively, to develop and extend one’s independence of language use.

Finally, the OECD (2009), say that teachers need to have in mind the expectations that they have about their male and female students and from that to develop strategies to be able to raise the levels of self-confidence and motivation of students in those subjects or areas where the different students are weak.

We, teachers, may have a perception of what boys and girls in our classrooms are capable of performing but we cannot forget that the stereotype of girls working hard and boys playing around may not always be the real truth. We cannot forget to look at each and every student as an individual with different needs and abilities and starting from this point we must help our students to be motivated and to have a positive attitude towards school and learning.
5.3 Discussion.

So far, this degree project has gone through many factors that may be the responsible of the underachievement of boys in school. This discussion aims to give an answer to the first two questions of this degree project: Do girls and boys learn in a different way? How do social aspects affect our students in their school performance?

The many factors responsible for the male underachievement do not work by themselves but interact with each other. Of course the nature of men and women is different, so are our brains, the different structure, hormones, chemical reactions produced in our male or female brain may be responsible for our external acts, but we cannot forget that some time the external factors are the ones that may trigger all these reactions in our brains. This paper has studied students’ attitudes, society’s and teachers’ perceptions as factors which may trigger the actions of the girls and boys in school. There are other factors such as the ethnicity, the socio-economics that may also be responsible of the behavior of the students in school, and that are beyond the scope of this paper.

Reading skills seem to be one of the main reasons attributed to the boys’ low performance in compulsory schools. Reading is essential in almost all subjects in school. Having a good attitude towards reading may help children to gain a better understanding of any subject. Teachers should try and harness this from the very beginning of our students’ schooling, so they do not give up on school.

Regarding the boys’ attitudes towards school, boys perceive that there is a close relation between their masculinity, popularity and achievement. The idea of being a male should not go hand in hand with the idea of being an underachiever. It is our duty as teachers to change this view and to show our students that being a male does not mean to be unsuccessful or to be a victim of the peer pressure. We must change their view of what being popular means and give our students the opportunity to change into positive social higher achievers.
Concerning educational expectations and the teachers’ perception, I agree with Younger et al (1999) on their comment about the big challenge that teachers are facing when trying to raise boys’ achievement levels. They suggest that teachers need support, and emphasize the need to raise the awareness of trainee teachers. This can be done by devising ways of working more effectively with boys, encouraging the implementation of teaching strategies which foster more discussion and collaboration in the classroom, and which support cooperative and interactive teaching and learning, and resources at local level. Teachers should be given the necessary tools to improve all the mistakes that have taken down our students’ achievements.

Finally, I think that there is no room for stereotypes in our classrooms. Teachers have to be more aware of gender differences while not forgetting the individual characteristics that every human has. We all have the same rights to education. It is important to work on a daily basis against any kind of discrimination and to develop preventive strategies. Some scholars think that the solution may lie on the formation of single-sex classrooms. Michael Gurian (2011) is one of them; he ensures that research about single-sex classrooms has shown improvements in girls-only schools and classes, especially in the subjects of Mathematics and Science. He also says that the same results have shown that the boys are improving in reading, writing and behavior management. His affirmations clashes with the ones from the PISA (2009) report which says that the question of whether males and females are better being schooled in single-sex or mixed-sex surroundings continues to be a vexing one for education authorities around the world. The evidence from PISA does not support the notion that females tend to do better in a single-sex environment. However, the report advises to be careful with the interpretation of these results because of the relatively small numbers of students and because PISA does not measure either the social environment or the social development of students which is also an important goal of education. Thus, with the basis that gender research has already shown us, and proved the gender differences in learning and how the different social aspects studied in this degree project affect the male students’ performance, the next step in this degree project is to evaluate the language learning potential that the single-sex education may have.
6. The single-sex classroom

This section of the degree project addresses the second research question “How can research into education and gender provide a basis for evaluating the language learning potential of single sex classrooms?” The topic of single-sex classroom seems to be a current issue in many countries. Some scholars are convinced that this may be the solution or the strategy that may close the gender gap. Therefore, this section explores whether the single-sex classroom can enhance the chances of boys in compulsory schools.

6.1 A definition of single-sex education

Single-sex schools or classrooms have been used since the nineteenth century, particularly in secondary and higher education. In many cultures single-sex education has to do with tradition and religion and is practiced in many parts of the world. Jones (2010) says that the single-sex school initiative was established in an effort to reinforce traditional gender roles and additionally to “level the playing field” in student academic achievement. Single-sex or gender education places the male and female students in separate classrooms or schools. In our modern society, many scholars that explore strategies to close the gender gap have seen single-sex education as a possible resource. Gurian (2011) explains that boys and girls tend to pair to work with peers of the same sex and they try to avoid working with the other gender. Men and women enjoy each other’s company but they find it easier to work with their same sex. He affirms that
many teachers see single-sex education as a possible educational improvement that may help our students. Gurian’s affirmations are based on brain research theories; he says that the human brain is sexualized and genderized—it is male and it is female. He explains that in an area such as verbal skills, where the female brain tends to develop earlier and has more cortical resources for processing verbal information, some males are lagging behind and ultimately lost, and vice versa with spatial processing and higher math and science abilities (p.207). Gurian also says that many learning and disciplinary problems that occur during secondary education could be solved if more schools would use the single sex options.

6.2 Why is single-sex education such a hot topic?

The search for new formulas and new strategies to increase the achievements of boys in school has resulted in many scholars rethinking and seeing actual single-sex classrooms as a new way forward. As Younger and Warrington (2006, p.613) say, the resurrection of interest in single-sex classes in many developed countries has been generated almost exclusively by a concern for boys and a general panic about their achievement level, their apparent disaffection and disengagement from schooling, and their seeming dislocation from aspects of society.

The idea is to combine single-sex classrooms with a mixed-sex environment. Single-sex classroom should be applied in those subjects where the gender gap exists, such as Math, Science and in our case second languages. This was the plan of many schools where Warrington and Younger (2003) carried out their research. They chose 31 English co-educational schools which tried out single-sex classrooms. The article is the outcome of a study funded by the Department for Education and Skills to
explore the ways in which schools were introducing single-sex teaching, and to try to assess its impact on achievement. These schools had different views of why the single-sex classroom should be tried out. Some schools wanted to see the different learning styles of girls and boys, others wanted to improve upon the underachievement of boys in some specific subjects. English and foreign languages were subjects of most concerned in many of the schools. A Cambridge school implemented single-sex teaching in Year 8 (12–13-year-olds) to give boys a positive experience in English and to raise self-confidence in the subject, before returning to mixed-sex teaching in Year 9 (p.341). Other schools used single-sex classrooms to improve the boys’ bad behavior in mixed groups in the hope that boys would behave better in single-sex teaching groups and that levels of achievement would therefore improve.

6.3 The single-sex education: pros and cons

Before making the decision to use single-sex classrooms we must evaluate whether using the single-sex classroom is beneficial or not for raising the boys’ achievements; furthermore, consideration should be given to how a single-sex classroom should be planned in order to increase learning outcomes. We must also be aware of the disadvantages and the problems that could arise when using such a strategy.

6.3.1 Preparing, introducing and organizing single-sex classrooms.

The preparations before starting with single-sex classrooms must be well organized to be able to obtain good results for such an experiment. In Warrington and Younger (2003) we read that the approach to the single-sex classroom strategy must be well prepared. All the individuals playing a role in this strategy, teachers, principals, parents and students should be well informed about the process in order to provide a positive attitude towards this “experiment”. The authors say that while some schools did believe
that single-sex teaching had impacted positively on their results, not all were so convinced. Some schools had abandoned this form of grouping for this very reason that little difference in results had been achieved. These tended to be schools where single-sex teaching had either been undertaken for only a very short period, or where some staff lacked commitment to the initiative, or where apparently little thought had gone into teaching strategies or management issues.

Warrington and Younger (2003) study how the schools prepared the single-sex teaching in many and at varied levels. Some schools had not prepared at all, and in a few schools there were teachers and relevant personal that were against using this strategy. Others, had prepared teaching strategies before the single-sex classrooms were introduced, with departmental staff meetings held regularly to discuss use of resources and teaching approaches. The amount of preparation given to the students and parents varied also from school to school. Some had not prepared their pupils at all, others prepared their students with positive explanations and how this would increase the students’ achievements.

Not just mental preparation is needed when starting out a single-sex classroom. New teaching strategies must be also introduced to adapt the new classroom to the students. The aim is not only to have a classroom with just one gender but to have an approach in the classroom which may be beneficial to the individuals on it. Warrington and Younger (2003) say that some schools had prepared a long list of teaching strategies when teaching boys: interviewees talked about short, carefully structured tasks, a very quick pace to lessons, small-group work, the use of writing frames to give structure to learning and writing, focused question and answer sessions, competitive activities, emphasis on oral work, short-term targets, a more kinaesthetic approach, immediate feedback, the use of information and communications technology, a focus on facts, and a greater degree of negotiation (p.344).

Apart from the strategies mentioned above, Warrington and Younger (2003) also explain that four of the schools also made a point of ensuring that ‘effective’ role models were provided through male teachers teaching boys, and female teachers teaching girls. However, the male bonding between male teachers and students can serve to reinforce “laddishness” and hegemonic forms of masculinity, and certainly one interviewee felt that a young male teacher may have inadvertently encouraged laddish behavior among the boys in his group. Furthermore, as mentioned earlier in this degree
project, the sex of the teachers was not considered a factor which could influence the underachievement of boys, but a matter of taste. In another study called “Teaching modern foreign languages in single-sex classes in a co-educational context- review of a project in a North Yorkshire comprehensive school” by Chamber (2005) the sex of the teacher “problem” was solved by giving the opportunity to the teachers to choose a boys’ or a girls’ class.

Gurian (2011) also gives a long list of strategies for boys when working in single-sex classroom:

- Make sure every middle school teacher is trained in male hormonal and adolescent brain development.
- Use single-sex groups and classes whenever possible.
- Increase group work and pair work.
- Increase character education and absorb it into all classes.
- Have high expectations, both in academic areas and for social maturity.
- Talk about and model “heroic” behavior, ideas, and stories that show adolescents what it means to truly “be a man”, that is, an adult male who is essential to his community’s care and development.
- Offer boys rite-of-passage experiences.
- Provides boys with quick tension-release strategies, both within and outside the classroom.
- Teach and integrate emotional literacy and emotional development curricula in all courses, not just human growth and development class.
- Teach sexual ethics curricula in all applicable courses, including gym (where boys especially after physical movement, can often be honest and attentive about links between emotional and sexual feelings).
- Teach media literacy in all applicable courses, and help train parents to know the effects of prolonged exposure to video games and television on the developing brain of the adolescent child.
- Carry out consistently applied discipline systems in all classes, with teachers and administrators working as a discipline team, rather than as isolated authorities.
Bring in mentors from the community for every young person who needs one, and match every middle school student who is capable with an elementary or preschool student; consider making mentoring a homework assignment (p.262).

Since the focus of this degree project is on the language classroom, specific strategies concerning this subject must be approached when using single-sex classroom. Barton (1997) says that specific features of the language lesson may pose a threat to male identity. She says that many boys regard reading fictional novels as a feminine activity; instead, they prefer to read informative texts, magazines, comics, newspapers and articles on the Internet. This point needs to be borne in mind when acquiring the foreign language library necessary to comply with the National Curriculum's requirements that pupils 'choose reading material and read independently', though it is doubtful whether the textbooks available will adequately accommodate male interests (p.13). Barton also mentions that since boys have better spatial or geographic memories, to maximize boys' potential to memorize vocabulary, a fundamental part of language learning, we need, then, to make use of illustrations and to draw tangible connections with words (p.15)

The article called “‘War, guns and cool, tough things’: interrogating single sex classes as a strategy for engaging boys in English” by Martino, W. and Meyenn, B. (2002) explores the effect of the use of single-sex classes, as a strategy, on English teachers in their approach to teaching both boys and girls at one particular Catholic coeducational school in Perth, Western Australia. The main rationale at this particular school for introducing single-sex classes is also related to concerns about the falling literacy standards of boys. According to one teacher, the Head of Department had provided teachers with research which supported the view that boys’ literacy levels were much lower than those of girls. Single-sex boys’ classes were conceived, within this context, as a means by which to enhance and facilitate boys’ engagement in English classes. One teacher also mentioned specific professional development which had been provided for the English staff and which had involved an outside presenter offering reasons why boys were rejecting reading. The following specific strategies were designed to enhance boys’ participation and engagement in English:

(i) improved classroom learning environment and self-esteem for both boys and girls;
(ii) modification of pedagogy to reinforce gender stereotypical learning
behaviours;

(iii) modification of curriculum content to accommodate boys’ and girls’ interests;

(iv) enhanced curriculum decision making spaces to address specific gender issues for both boys and girls.

(p.309)

The authors (Martino, W. & Meyenn, B., 2002) concluded that single-sex classes as a strategy per se do not necessarily produce enhanced social and educational outcomes for students. Rather, as indicated in the research, there needs to be more attention directed to the particular effects of pedagogy and the normalizing assumptions about gender that inform the implementation of curriculum in both single-sex and coeducational classes.

To sum up, informing parents, teachers and the Head of the school is a significant step to take when starting a project like the single-sex classroom. To have a positive attitude towards the project contributes to improving the outcome. However, the strategies specifically designed for the project will decide on whether the project is successful or not. These strategies should take into account the characteristics of the individuals, the specific goals to achieve with every group and every subject to obtain such a positive outcome. When it comes to the subject of English, literacy seems to be one of the problems that must be solved and particular strategies must be taken into account.

6.3.2 Pros and cons.

This degree project needs to evaluate whether the single-sex classes are beneficial or not to enhance the possibilities of the students. The way to do that is evaluating the pros and cons of this strategy.

The article “Teaching modern foreign languages in single-sex classes in a co-educational context — review of a project in a North Yorkshire comprehensive school” by Chambers, G. (2005) is a study carried out in a co-educational comprehensive school in North Yorkshire. The Head of the Language department was concerned about the gap between boys’ and girls’ performance in French and German on GCSE. The teachers opted to teach year 8 languages classes as single-sex groups.
Pupils' performance, motivation and attitude, as well as the experiences and views of teachers were reviewed. In this study boys thought that languages were more difficult than most other subjects. The outcome of this study showed both pros and cons. One of the disadvantages found was that single-sex classrooms offer a limited social dimension and deny pupils access to the view of the opposite sex. A single-sex class is not necessarily an easy option for the teacher. Boys’ poor behavior can become even worse. Girls’ classes too can be challenging (p.47). Particularly worrying was the tendency of the staff to regard boys and girls as homogeneous groups with common needs rather than individuals with specific needs. Some of the advantages were that pupils enjoyed working in single-sex. These pupils felt more able to participate in oral activities, contribute in class and ask questions related to their learning. Pupils' confidence levels improved (p.53) However, the authors conclude that it is likely that successful learning and teaching are linked to many more factors than simply gender. More important, perhaps, than the creation of relatively homogeneous teaching groups, may be a commitment to meeting the needs of individual pupils (p.54).

One of the advantages of using single-sex classes is the student responses to such strategy. In Warrington and younger (2003) some schools had evaluated student responses to single-sex classes through a questionnaire survey, and student responses in these instances were reported as overwhelmingly positive: in an Essex school, 90% of students were found to be in favor, while a Hartlepool school reported that 98% of students were positively disposed towards single-sex classes. Informal evaluations by 16 schools showed that pupils were almost always in favor, with girls being particularly positive. However, it is again the case that schools that put a great deal into making single-sex teaching work, and that took the trouble to ascertain student reaction, were those where this form of grouping was most likely to be received positively (p.346). Warrington and younger (2003) also evaluate that one of the most positive aspects of single-sex classes was the increased amounts of participation in lessons by the students, and greater levels of confidence. Both articles, the one from Chambers (2005) and the one from Warrington and younger (2003), agree that the level of participation and the level of confidence increased among the students when working in a single-sex classroom. Therefore the language classrooms can clearly benefit from this since participation and confidence are two important factors that may help students to achieve
better grades. However, a clear disadvantage found in this report was that boys’ laddish behavior was felt to increase by the staff. Not all the schools in the study found classroom management easier in single-sex classes, with four commenting explicitly on the difficulties encountered in handling large groups of boys, particularly in lower sets (p.347)

The article called “Can single-sex classes in co-educational schools enhance the learning experiences of girls and/or boys? An exploration of pupils’ perceptions. British educational research journal” by Jackson, C. (2002) concluded that while teachers argued that boys would behave better ‘without the girls to distract them’, it appeared that boys may be distracted more by each other than they were by the girls. Furthermore, if single-sex classes are to begin to challenge problematic male behavior, they must include elements that encourage boys to reassess gender relations and challenge traditional notions of masculinity. Indeed, if schools are to try single-sex grouping, the introduction of classes that have a reform agenda for boys may be a better way to proceed than introducing curriculum-as-usual classes. Jackson’s view about the implementation of single-sex classes is similar to the one held by Younger and Warrington (2002). They argue that by themselves, single-sex classes do not offer a guaranteed solution or a quick fix to issues surrounding the ‘underachievement of boys’. There are dangers in implementing single-sex classes without coherent staff development programs which address teaching and learning strategies, and which include rejection on sex segregation and coeducation by the pupils involved.

On the contrary, Sukhnandan, L., Lee, B., and Kelleher, S.(2000) say in the article “An investigation into gender differences in achievement: phase 2—school and classroom strategies” that the modification of teaching approaches, in terms of lesson structure, teaching methods and curriculum materials, to match the learning styles of boys and girls can be perceived as an approach that simply reinforces the different learning styles of boys and girls by exploring the areas where they are strong and by ignoring their areas of weakness. Although this may lead to increased pupil achievement in terms of examination performance, it may work to reinforce gender stereotypes regarding appropriate teaching and learning methods for boys and girls (p.28).

Summing up, the most notable advantages when using single-sex classrooms are the improved levels of participation and confidence of the students.
Another advantage was that students in general seem to enjoy working in single-sex classes. Some of the disadvantages noticed in the different researches reviewed above are that single-sex classrooms limited social dimension and deny pupils access to the view of the opposite sex; boys’ poor behavior can become even worse; the tendency of the staff to regard boys and girls as homogeneous groups with common needs rather than individuals; and boys’ laddish behavior may increase.

6.4 Conclusion

This degree project has explored how research into education and gender can provide a basis for evaluating the language learning potential of single-sex classrooms. Some advantages and disadvantages have been found in this process. The advantages were that single-sex classrooms can improve the confidence and the participation of the students. These advantages can be beneficial in the language classroom since they are major factors that may improve the achievements of the students in this subject. Research has shown that single-sex classrooms can be positive when class management is well prepared. However, research has also shown that single-sex classrooms can reinforce gender stereotypes; the single-sex classrooms do not improve behavior and it limits the social dimension of the students. These disadvantages can make us think that mixed-sex classrooms are better than single-sex classrooms but mixed-sex classrooms involve other problems as Younger and Warrington (2006) say “there is plenty of evidence that boys command more attention from their teachers in mixed-sex classes”. Therefore, it is important that the strategies to raise boys are not implemented at the cost of the achievements of the female students.

This degree project has not found clear evidence to support entirely or to discard single-sex classrooms. Research has shown that some scholars thought that single-sex teaching can raise achievement levels, while others do not; some have seen
behavior improve, while in others it has worsened. Research has shown that single-sex classrooms per se cannot raise the students’ achievements and improve behavior. Single-sex classrooms must be well organized. Younger and Warrington (2006) have come to a list of preconditions that can improve or remove some of the disadvantages found in this degree project. They say that single-sex classrooms can be a successful experience for girls and boys, where the senior management team is committed to single-sex teaching as a mode of organization, and is willing and able to establish a strong ethos for its implementation either across the school or in the relevant departments, and where all members of the team is fully committed to it. Teaching and learning strategies that engage and improve motivation must be developed. There also needs to be a willingness to sustain, monitor and evaluate single sex as a mode of organization through time, and to diffuse the good practice which might be identified. Most importantly, there must also be a willingness to implement gender reform strategies, to resist strongly any stereotyping of girls and boys in relation to gender, and to challenge any practices and behaviors which reinforce stereotypical gendered roles.

The aim of this degree project was to evaluate whether the chances of the male students in the language classrooms can be improved by single-sex teaching. In my future practice as a teacher I feel that single-sex teaching can be beneficial when working in groups with my students or when gender issues must be take into control. Since it can enhance the participation in oral activities it can improve the communicative skills of the students which are major goals in the subject of English. This degree project has found that the current issue of single-sex teaching is growing and becoming more and more interesting for many scholars all around the world; however much more must be done in this field since single-sex classrooms seem to be an unclear option to completely close the gender gap yet.
7. References


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