WHO WANTS TO SHARE?
SINGLE-GENDER INSTRUCTION AS A WAY
OF PROMOTING PARTICIPATION IN WRITING ACTIVITIES

By
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Abstract

In this paper I look at how gender segregation in writing classes could increase the amount of on-task behaviour and voluntary sharing of work. Following a review of recent research in the fields of biological gender differences, single-gender instruction and gender and writing, a study of a grade seven writing class is described. For eleven weeks, I observed both mixed and single-gender groups during a variety of writing activities. Using observations, tally charts and anonymous surveys, I amassed qualitative and quantitative data. These are analyzed to show that improvement could be seen in the areas of voluntary sharing and less off-task behaviour. A discussion and implementations are included.
# Table of Contents

Abstract ..................................................................................................................... ii  
Table of Contents ..................................................................................................... iii  
Acknowledgements .................................................................................................. v  

**INTRODUCTION** ................................................................................................. 1  

**LITERATURE REVIEW** ...................................................................................... 2  
  
  Introduction ........................................................................................................... 2  
  Overview of the History of Co-education in North America ................................. 3  
  A Brief Overview of Theory and Research on Biology and Learning in Relation to Gender........................................................................................................... 4  
  A Brief Overview of Studies of Gender and Learning ........................................... 5  
  A Brief Overview of Research on Gender and Writing ......................................... 9  

**THE STUDY** ....................................................................................................... 11  
  
  Design ..................................................................................................................... 11  
  Research Site .......................................................................................................... 12  
  Participants ............................................................................................................. 13  
  Data Collection and Data Sources ........................................................................ 14  
  Data Analysis .......................................................................................................... 17  
    Surveys ................................................................................................................ 17  
    Tally Sheets ......................................................................................................... 17  
    Field Notes ......................................................................................................... 17  
    Triangulation ...................................................................................................... 18
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Finally, to my fellow cohorts, you have been a constant source of encouragement and motivation. To be completing this program with such an amazing group of women is an honour. I am proud to have you as my colleagues, mentors and above all, my friends.
INTRODUCTION

I began teaching at Clearbrook Elementary four years ago at the upper intermediate level in the French Immersion program. As is the way with most classes in the public school system, I had students with a large range of learning styles, abilities and desires within my four walls. I teach in a fairly affluent area where parent support ranges from daily parent/teacher discussions to sporadic phone calls home initiated by me. The students in my class come clothed (quite often in designer labels), fed, and tired from a multitude of extra-curricular activities. Though I do not have many students with learning disabilities in my French Immersion class (like my grade six English counterpart next door), I am at times dumbfounded by the debilitating effect social issues can have on the learning within my classroom.

Social issues in the classroom, from disputes amongst young girls and boys about playground problems, to the jockeying for position in the cool crowd, can have a negative effect on learning. Through my experience I have begun to wonder about different measures to ensure a more healthy social environment in the classroom which would encourage more academic risk taking and achievement. Is it possible to ameliorate the disruptive aspect of social behavior from the classroom? Is it possible to change the way boys and girls work together in order for them to produce a higher level of work?

My purpose for designing this study was to gain further information on how to better motivate students of the upper intermediate level to write more meaningful content, to share their work, and to participate in group writing activities. I believe that the students could become more fluent and confident writers if I can establish an environment in which they feel most comfortable taking risks. Through my research I am hoping to inform my pedagogy on how best to motivate risk taking and better writing from my students by asking: Do students who are
taught narrative writing in single-gender groups participate and engage more in writing activities?

**LITERATURE REVIEW**

**Introduction**

Do boys and girls learn differently? This is a theme in education that has been discussed and reviewed for as long as education has been a part of society. If boys and girls do learn differently, then why does our current education system teach them in the same ways? There are many well-known arguments for and against coeducation (mixed-gender) and single-sex education, but very little has been said for single-sex classes in a coeducational system. It seems to me that combining the positive aspects of the coeducational program, such as: social normality, gender equality, and gender identity to name a few, and the positive aspects of a single-gender program, such as: gender appropriate teaching, increased confidence, and fewer social distractions, might result in a system that would encourage academic achievement and growth without limiting the social interactions integral to a healthy development, especially at puberty. Boys and girls would be given the opportunity to socialize and learn in mixed gender groups while still being taught in a way that best suits their academic and social needs.

In this paper I first look very briefly at the history of coeducation in order to better understand the roots of the current school system. Second, I look at the science that argues that boys and girls learn differently, and explanations for why this might be. Third, I analyze the research that has been done in the field of single-gender and coeducational classes and schools and, finally, I will look at studies that take into account gender differences in writing.
Overview of the History of Co-education in North America

Education’s early roots were, for the most part, in one-room schoolhouses where one teacher taught over forty students of all grade levels. Most children went to school to learn to read, but they would soon leave the classroom for work in the fields or in the home. Those who did continue did so largely through single-gender colleges in large cities. The push for coeducation in the 19th century was prompted by several important justifications. Even before the Civil War, early feminists feared that girls’ schools and colleges would receive inferior education in comparison to their male counterparts (Rosenberg, 1988). They felt the only way to ensure equal education was to be taught alongside the men. Another contributing factor was the need for more students at the university level. After the Civil War, many higher education institutions in the United States began admitting women for economic reasons. As many young men had lost their lives to war, universities such as Cornell and Berkley began to open their doors to women in order to offset the loss (Rosenberg, 1988). Some advocates even saw coeducation as a way to subdue the preoccupation with sex found in a system where boys and girls were separated at a very important age. Coeducation was seen as a more natural and sexually healthy atmosphere for learning (Rosenberg, 1988).

Though their experiences varied, by the end of the 19th century, women had access to the same education as men in 97 colleges and universities across the United States. In Canada, both the University of Toronto and McGill University were enrolling women by 1884. By 1900, many colleges and universities actually reported higher female enrollment than male. However, as Rosenberg (1988) points out in her article, “What remains uncertain is how fully coeducation lived up to the hopes of its early advocates” (p. 1).
A Brief Overview of Theory and Research on Biology and Learning in Relation to Gender

“There are no differences in what boys and girls can learn. But there are big differences in the best ways to teach them” (Sax, 2005, p. 106). This quote summarizes the theme of Leonard Sax’s book, Why Gender Matters (2005). As a practicing family doctor, Sax was looking for answers (and reasons) for the steady stream of young boys coming through his office holding notes from the school explaining how they must have Attention Deficit Disorder (ADD), or Attention Deficit Hyperactive Disorder (ADHD). Dismayed and frustrated by the enormous increase in the number of children on medication for these disorders, he decided to investigate further into a better way to teach young boys, and subsequently, young girls.

Researchers argue that male brains and female brains are organized differently (Gurian, 2003; Sax, 2005). They explain that women use their brain more globally than men, whose brains are much more compartmentalized; women use their whole brain for language activities, while men use the left hemisphere. Not only are women’s brains organized differently, according to these researchers, but their brain tissue is intrinsically different (Gurian, 2003; Sax, 2005). Coupled with the differences in the brain are the differences in hormone levels. Gurian explains that because boys produce less serotonin they tend to be more fidgety and impulsive, while females, who produce more oxytocin, are usually better able to react empathetically to others.

Further to their brain and hormone differences, physical gender differences also exist, both in how males and females hear and see. In fact, in a study done by pediatric audiologists Barbara Cone-Wesson and Glendy Ramirez (1997), it was found that baby girls have an acoustic brain response approximately 80 percent greater than that of baby boys. This is obviously the tip
of the iceberg when it comes to differences in the sexes and how they learn, but it is enough to look further into how our current system could possibly be shortchanging both genders.

**A Brief Overview of Studies of Gender and Learning**

Armed with some theory and research on how boys and girls learn differently, I began searching for studies that had focused on gender segregation in education. These studies are not easy to find. The primary problem I found with the research I was able to obtain was that it either looked at single-gender schools (the majority of them in the Catholic school system) or it focused mostly on the benefits only for girls. I also found that many of the studies did not look at how changing techniques and teaching styles could motivate learning for both genders.

In addition to the aforementioned shortfalls, Argamon, Fine, Koppel and Shimoni (2003) discuss that many single-gender/mixed-gender studies are flawed in their methodology because the researchers go in assuming there will be differences and the research turns into a “fishing expedition” (p. 324) to identify those pre-conceived differences. With these limiting factors in mind, the studies were still helpful and therefore, I summarize the findings of research done in the United States, Australia, England and Canada.

Over the course of two years (1993-94) a study was done in this very area. Lesley Parker and Leonie Rennie (2005) had set out with a goal “to enhance understanding of the implementation of gender-inclusive instructional strategies in high school science classrooms, with particular reference to any differences in the effectiveness of such strategies in mixed-sex and single-sex classrooms” (p. 881). They focused their study on 10 government-operated, coeducational Australian high schools with a great diversity in ethnicity, size and location. After observing both single-gender and mixed-gender science classes, they categorized their findings according to teachers’ perceptions, students’ perceptions and observers’ perceptions.
The overall findings were favourable towards the single-gender classes with the most positive feedback coming from teachers and students of the all female classes. Many of the male teachers found themselves looking at how girls learned for the first time: “how girls prefer to learn was a connection I had not made before [male teacher, girls’ class]” (Parker & Rennie, 2005, p. 888). The learning environment in the girls’ classes was perceived by all parties to be “more pleasant environments than mixed-sex or single-sex boys’ classes.” (p. 888). Furthermore, there were perceived “increased levels of academic achievement and increased opportunity to learn” (p. 889). It appears that because the girls felt more comfortable amongst themselves, and had fewer distractions, they were able to take more academic risks and accomplish more.

Another point I noted was the number of teachers interviewed who expressed how changing their examples and teaching styles really benefited the girls. One such teacher explained “[I was] able to relate science to their experiences... I used women’s magazines to relate science to their world... [female teacher, girls’ class]” (p. 890).

Parker and Rennie had similar findings, though not as prominent, in the single-sex boys’ classes. Some boys liked the single-sex boys’ classes because they were better able to be themselves: “[... I like] being able to talk to other boys about school and personal stuff without being put down by girls” (04263, Year 10 boy, C grade, p. 891). On the academic side, boys seemed to be slower to adapt to the new system, but eventually saw the same benefits as the girls. Though a generalized perception, perhaps one of the male teachers summarized it best:

“teaching a single-sex class before I realized that the boys and the girls have special needs that are quite different, and I was alarmed to see that the boys weren’t doing as well... You need to be aware that boys have very highly sophisticated writing avoidance...
strategies and once you are aware of that you can address it with a variety of skills that you have as a teacher…. (p. 892)

Other teachers also noted specific weaknesses with the boys that they were better able to target in the single-sex boys' classes.

The benefits for single-sex classes became more and more evident throughout Parker and Rennie’s study, and, in fact, teachers began to notice how their teaching practices in mixed-gender classes could be detrimental for both groups. They noticed they were more likely to “gloss over boys’ poor communication skills and do little to develop these through co-operative group work and other strategies” (p. 893). And as for the girls, they were “unable to give the girls the opportunity for risk-taking, and open-ended problem solving” (p. 893).

I question whether the same results would be found in elementary classrooms where students are separated only for key subjects such as Math and Language Arts. Parker and Rennie (2005) were able to take multiple opinions and situations in order to give a general picture of what this would look like for older students when specific instruction was given to teachers on how to effectively teach their single-sex classes. Would teachers without this training see similar results? Furthermore, these researchers allude to academic improvements, but no specific evidence is given in this article.

In general, there is little evidence that proves definitively that boys and girls see marked academic improvement in single-sex classes. In their study, Robin Wills, Sue Kilpatrick and Biddy Hutton (2006) found “[t]eachers adopted different strategies from those used with mixed-gender classes and gained higher levels of satisfaction from teaching, attributable to increased children’s time ‘on task’. Paradoxically, standardized school testing indicated no increase in academic achievement” (p. 277). They go on to explain that the focus on single-sex classes at
the elementary level is rare and the findings are contradictory. One substantial problem with the research that has been done is that it is very difficult to compare the findings between single-gender and mixed-gender schools because there are very few single-gender public schools (elementary or secondary), and of those that are single-gender, the majority of them are religious. Moreover, the single-gender schools that are available for study are mostly selective of their students and therefore a comparison to similar public schools would be irresponsible (Mael, 1998).

Of the studies that have been done, most point to increased comfort levels, higher academic risk-taking and more gender-inclusive teaching strategies as reasons behind academic improvement (Hutton et al., 2006; Mael, 1998; Salomone, 2006; Warrington and Younger, 2002). Warrington and Younger were able to evaluate conclusive data which suggests that there is an academic benefit from prolonged single-gender education within a coeducational system. In their study, they compared the results from a school “where single-sex teaching has been the norm since the school was established in the 1970s” (p. 353) to the national average on the General Certificate of Secondary Education examinations in England over a 12 year period (1988-99). They found that at this particular co-educational comprehensive school, which offers single-gender classes for most subjects, “the percentage of boys within a year group achieving five A-C grades has increased from an average base of 34.7% [from 1988-90] to 59% (1997-99), a proportional increase of 70% against the base years; the comparable national average is 38.2%” (p. 356). Their findings for girls were similar where their proportional increase was 70.4% compared to the national average of 43.9%. They further discovered that the rate of academic improvement within the school is similar, with girls having a slightly better average than the boys, but both groups are higher than the national average.
Though the data collected by Warrington and Younger are certainly convincing, many more studies would have to be done to conclude that single-gender classes are advantageous. A study done on a single school is, at best, motivating, and at worst, misrepresentative of the potential for single-gender classes. But, as educators, we know that academic achievement is not the sole objective of education. Especially at the elementary level, school is as much a way of socializing children as it is for teaching them to read and write. Many studies have seen the positive effects single-gender classes have on the overall school community.

In their study of a primary school in Australia, Hutton, et al. (2006) concluded that social skills had to be specifically taught to the boys. With this realized, the teachers were able to prioritize social education and, as a result, the parents "thought that their children were happier at school and believed they were happier with their school friends... Parents and teachers attributed this improvement to the gender specific programs in each class." (p. 285) Mael (1998) found that separating seventh graders into separate male and female classes improved male behavior and female motivation and academic performance" (p. 113). In a co-educational classroom, boys monopolize the teacher's time and the linguistic space, thus making it difficult for the girls to communicate and learn effectively (Salomone, 2006). When boys and girls are separated, teachers can spend more time with the boys on proper social expectations and the girls are better able to freely express themselves and ask questions to the teacher. Staff in the Hutton et al. (2006) study also noticed a marked improvement in the attitude and engagement of the boys towards their schooling.

A Brief Overview Research on Gender and Writing

In addition to the various arguments pertaining to the ways in which boys and girls learn best, there are also views suggesting that boys and girls have different preferences when it comes
to what they write. Argamon et al. (2003) looked at several studies that have shown that female writers prefer to write about relationships and focus more on the interpersonal connections between their characters. These conclusions are drawn from their research data which shows that “female writers more often use personal pronouns that make explicit the gender of the ‘thing’ being mentioned (third person singular personal pronouns), while males have a tendency to prefer more generic pronouns” (p. 331).

In her study, Shelley Peterson (2002) analyzed the effect gender has on writing and genre. Using a grade eight class, she held discussion groups with the students regarding their choice of writing. The most notable difference was with the romantic genre. Peterson (2002) noted in her findings that “[t]he students unanimously asserted that romantic topics ... were exclusively feminine” (p. 355). Crossing the gender line was seen as acceptable for girls who could write about sports and action; however, for boys the range of topics was limited to sports and relationships between coaches, friends and family.

In another of her studies, Peterson (2000) outlined very general categories of preferred genres for grade 4, 6 and 8 students. She found 3 categories related to topics: 1) Primary territory/tertiary territory (girls tended to situate themselves within the primary territory, where boys often situated themselves beyond their personal experience); 2) Gender of character in control (girls would put females in both power and powerless roles, while boys generally used males as the power role and have few roles for females); and 3) Presence/absence of violence and/or action (violence and action tended to be prominent in boys’ writing but not as much in girls’).

Both Argamon et al. (2003) and Peterson (2000, 2002) claim to have found differences in the genres boys and girls prefer and how they use language in their writing. These differences
could be related to brain chemistry and hormones as discussed by Sax (2005) and Gurian (2002), or by societal influences and expectations (Peterson, 2002). Whatever the reasons, it appears that boys and girls may not only learn differently, but also have different writing preferences.

If we believe that children learn best in an environment where they feel secure and where they have developed a good relationship with their teacher, then it is the duty and responsibility of all teachers and schools to know how best to teach and relate to their students. “The clearly differentiated outcomes of boys and girls’ developmental trajectories have both academic and social implications” (Hutton et al., 2006, p. 279). Girls and boys may require different teaching environments in order to reach their academic potential and children deserve to learn and play in an environment best suited to their needs. Though it is not a new area of interest in the academic world, single-gender classes in a coeducational system appear to offer the best of both worlds. I then ask the question, does separating boys and girls for writing classes encourage more active participation and sharing of their work?

THE STUDY

Design

In my study I used a qualitative, teacher-research design drawing on the principle of action research. “Action research is a reflective, systematic inquiry that focuses on a relevant problem in teaching or teaming for the purpose of enacting meaningful change to address that problem” (Brighton 2009, p. 40). I chose to do teacher research because I felt the need to understand my students better so that I could be more effective in encouraging their engagement during daily activities. Though my study focused on the sharing of personal writing, I hoped that my findings would lead me to better judge the methods needed to inspire participation in all
subject areas. In fact, “many institutions in the US are trying to implement action research for
preservice teachers in order to develop the skills that will enable them to continue to learn from
experience and become better at teaching throughout their careers” (Gore & Zeichner, 1991, p. 119). Action research allows for a type of self-observation that is integral to professional
development. Being able to ask a question and find the answer is the key to life long learning,
and thus life long teaching.

In her article, Embarking on Action Research, Brighton (2009) explains that “first-person
action research usually involves one teacher studying his or her own classroom to better
understand his or her own behaviors, attitudes, practices, or context. The goal is often personal
change” (p. 40). Though I was not studying my own students (but rather the students I had
taught the previous school year) this statement is true. I was not seeking to change the behaviour
of the students, but rather to change my teaching practices in order to best suit their needs.
Action research allowed me to reflect on my practices as I observed how changes in my
behaviour in turn changed the student’s behaviour.

Research Site

Clearbrook Elementary (pseudonym) is a large elementary school in a suburb of a large
metropolitan city in British Columbia. With over 500 students in a school that offers both
French Immersion and the mainstream English program, Clearbrook is one of the few schools in
the district that was not suffering the consequences of cutbacks at the time of the study. As such,
the staff was encouraged to implement various technologies and resources in the classroom and
there is a community of ongoing professional development.

Clearbrook is located in an upper middle class residential area where residents have easy
access to many types of recreation and activities. The students of Clearbrook Elementary are
often enrolled in multiple extra curricular activities and the parents, in general, offer much support at home with schoolwork. As Clearbrook does offer both French Immersion and the regular English program, there is a wide range of ability levels in the school. Both French and English learning assistance and an ESL program are integral parts of most classrooms. Clearbrook often scores above average on the government issued Foundation Skills Assessment and is known for students with good academic standing.

The Participants

The participants for this study came from a grade seven class of twenty-eight students. These students had been enrolled in the French Immersion program for seven to eight years and there were no ESL learners, or any students who received regular learning assistance. The majority of the students in the class had been together in the same school for a number of years and at the time of the study, they were in their second subsequent year of being together in the same class. The students were taught by two teachers who share a love of writing, and this group had been given extensive time for creative writing and formal writing before the study took place.

There were eleven boys and seventeen girls, of which ten boys and fourteen girls and their parents consented to participate in the study, for a total of twenty-four. This particular group was chosen as I had taught these students in their previous year and had a good relationship with them. I was also very familiar with the dynamics and social groupings and felt I would be in a better position to notice any change in behaviour among a group that I had not worked with in the past.

Over the course of many years, this class has proved to be a very enthusiastic and hard working group. They are generally very comfortable around one another and have shown a
particular interest in writing. As my research was to focus on whether boys and girls participated more effectively and with increased comfort levels when separated into gender groups, it was important for me to have a group that included avid writers.

**Data Collection and Data Sources**

To begin the study I twice entered into the class while the regular classroom teacher taught a writing lesson. During these two different forty-five minute periods, I took field notes and observed how the students related to one another during the lesson and after, when given time to write for themselves. I used a table that I created to keep tally how many boys and how many girls were on task and engaged or off task and disengaged (see Appendix A). I would mark a P for active/positive participation, and X for off-task behaviour, and an S for the voluntary sharing of personal writing. I took this tally every ten minutes, resulting in four data points for each student for each session. Though the purpose of the study was not to follow specific students, but to look at gender differences, I still chose to include the pseudonyms of the specific students on the chart in order to gauge any specific changes that might occur.

Before beginning the second phase of the study, I administered a survey that I created that the students would complete anonymously (see appendix B). Their classroom teacher delivered the survey during a time when I was not present in the room. The survey contained both scaled and long answer responses. The focus of the survey was to determine how the students felt about sharing their personal writing with a mixed-gender group of their peers. The classroom teacher then returned the completed forms to me.

After my initial two visits to observe while the classroom teacher taught a writing lesson, I then taught my own writing unit. The unit was on personal narrative writing. This second phase of the study consisted of observations with field notes and the continued tallies of
P, participation, X, off-task and S, shared work, which I conducted. I began the unit by reading three examples of personal narrative writing and we discussed as a class what made each piece good and how to make them better. During the lesson I observed participation and used the tally chart to keep track of engagement. I then had the students free-write on the topic of “Sadness.” I chose a topic that was personal so that I might accurately judge their willingness to share personal writing. After thirty minutes of writing, I asked for volunteers to read their writing and took field notes on who chose to participate. I was looking to see how many were willing to share their personal writing so that I could compare if this increased over time. I continued in this fashion for three weeks with the mixed-gender group.

After completing the three weeks of writing in their coeducational group, I separated them into two groups. While I worked with the girls for forty-five minutes, the boys worked with their classroom teacher on their writer’s workshop, then the groups switched places. I continued to teach personal narrative writing and had an activity for each section prepared. I tried as best I could to vary the types of lessons I was presenting by putting in more movement into the lessons with the boys. I was conscious to use a louder voice and to keep the lessons dynamic and interactive. When working with the girls, I tended to be calmer and more discussion oriented. The students were also given the opportunity to write as they wished for the last fifteen minutes.

This lesson plan continued for another five weeks so that each group was given five lessons on personal narrative writing. Over the five weeks I continued to observe and take notes on the engagement levels of each student by gender.

Once the fifth lesson was completed, I explained that the next session would be our last and that it would be an author’s convention. Each of them would have the option to share the
writing they had done over the course of the last eleven weeks, but that it would be done in a mixed-gender setting. During this final class, I noted on my chart and made observations on how the students interacted and engaged with their writing and the writing of their peers.

To conclude the study, I had the classroom teacher administer the second anonymous survey that I had created (see appendix C). The aim of the second survey was to have the students reflect on their willingness to engage with the lessons and to share their writing in the single-gender group. The questions were purposefully very similar to the first survey so that I could easily compare and track any changes in attitude and comfort levels.

Table 1

*Research design*

<table>
<thead>
<tr>
<th>Date</th>
<th>Activity</th>
<th>Research Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lesson 1-2</td>
<td>Mme Smith teaching about introductions and conclusions</td>
<td>- tally charts (X, S, P)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- observations</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- field notes</td>
</tr>
<tr>
<td>Lesson 2a</td>
<td>First anonymous survey administered by classroom teacher</td>
<td>- read and analyze answers</td>
</tr>
<tr>
<td>Lesson 3-5</td>
<td>I teach personal narrative on variety of topics, all together</td>
<td>- tally charts (X, S, P)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- observations</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- field notes</td>
</tr>
<tr>
<td>Lesson 6-10</td>
<td>I teach, personal narrative on variety of topics, in separate gender groups</td>
<td>- tally charts (X, S, P)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- observations</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- field notes</td>
</tr>
<tr>
<td>Lesson 11</td>
<td>I teach, personal narrative, “Author’s Convention,” all together</td>
<td>- tally charts (X, S, P)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- observations</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- field notes</td>
</tr>
<tr>
<td>Lesson 11a</td>
<td>Second anonymous survey administered by classroom teacher</td>
<td>- read and analyze answers</td>
</tr>
</tbody>
</table>
Data Analysis

Upon completion of the collection of the data, I began the task of coding and organizing. I had 3 sources of data: 1) Tallies of participation, 2) Two surveys, and 3) Field notes. I had been able to maintain a good system of organization through the collection process, but I found the act of typing and inserting information into spreadsheets particularly helpful when looking for trends in the findings.

Surveys

I began by creating a spreadsheet for the first anonymous survey. I inserted the questions in the first column then proceeded to type the answers given by each student across the row. With this system I easily picked up trends and began colour coding similar responses. I was then able to create a list of major themes for each question. For example, for a question relating to why they did or did not like to share their writing, themes such as fear of criticism, a desire to get feedback and a need to keep feelings personal were highlighted in different colours. For the numerically scaled answers, I created bar graphs in order to gain a better understanding of the trends presented by these answers. The same procedures were followed for the second survey.

Tally Sheets

The results of the tallies described above in relation to engagement and on task behaviour were placed into a broken line graph.

Field Notes

The field notes that had been collected throughout the process were filed by date and any trends or significant observations, such as the types of pairings that were occurring during the mixed gender activities and how the students were off task (for example, were they talking, fiddling in their desk, being disruptive to others), were highlighted and noted on a master records
Triangulation

I looked across the three data sources for corroborating evidence related to my research question.

Results

Mixed-gender groupings

I begin with the results from the numerical answer questions in the first anonymous survey given in March, prior to the students being separated into their gender groups. The questions were all scaled from 1 (not at all) to 5 (a lot or all the time).

Figure 1.1 How comfortable do you feel sharing your writing in front of the class?

This graph shows that this is a class that already experiences a good level of comfort when sharing their work with their peers. None of the students rated themselves as a 1, and 21 of the 24 students claimed that they felt at least somewhat comfortable, with 5 of the 24 feeling very comfortable sharing their writing with their co-gender peer group.

When I analyzed the long answers to the question “What I like about sharing my
writing”, five themes appeared. First, 9 of the 24 students cited the receipt of feedback and opinions as one of the reasons they liked sharing their work. A boy wrote in his answer “... the audience can give you advice on how to improve your work” (male participant, survey 1). Another eight wrote about the pride they felt when their peers listened to what they had written. A third group of five students enjoyed expressing their emotions and being able to share their ideas and thoughts. A female participant said, “I can share my thoughts and imagination with my classmates... It is always interesting to see what emotion a person has after I’ve read my writing” (female participant, survey 1). Four students wrote about how sharing their work and listening to others was helpful to both themselves and others. And finally, two students discussed how it was related to public speaking, though one of those saw this as a negative, stating: “… I don’t enjoy reading with an audience. Public speaking isn’t fun.” (female student, survey 1).

Figure 1.2 How comfortable are you writing about personal feelings or experiences?
When asked how they felt about sharing personal writing (writing that would include feelings and more private ideas), three students admitted to not feeling comfortable at all, and only 19 of the 24 felt at least somewhat comfortable. An interesting finding is that six students said they felt very comfortable sharing their personal writing, compared to the five from the previous question.

When asked to give reasons for not wanting to share their writing, five themes emerged from their written answers: a fear of others’ opinions (7 students), a feeling that their writing isn’t good enough (5 students), embarrassment (7 students), a dislike for public speaking (5 students) and an overall dislike for sharing anything personal with their peers (7 students). One student said that he was afraid “people might make bad comments” (male student, survey 1) while another offered, “...after reading it out loud it wasn’t as good as I thought” (female student, survey 1). Though many of the participants gave interesting reasons for not wishing to share their writing, the overall feeling expressed through their answers was that they didn’t mind sharing their writing unless it was really personal. This idea is most explicitly stated by one of the male participants: “I only don’t like sharing my writing when it’s personal” (male participant, survey 1).
The participants in this study saw themselves as good, active listeners during writing lessons, with only 2 of the 24 participants stating that they paid attention less than most of the time. The student who gave himself a 1 out of 5 said his reason for not listening was because it was boring. The young girl who gave herself a 3 said it was because she only liked writing for pleasure. Interestingly, 3 of the 11 students who gave themselves a 4 said that they didn’t listen because they didn’t understand, which directly contributed to the lack of focus. However, a 4 out of 5 still represents a high level of attention.

Perhaps the most telling of the questions asked in the first anonymous survey was: “I would feel more comfortable participating in writing activities if,” and the participants were able to give a long answer response. Where the other questions elicited many different types of answers, this question brought forth only three main themes. Nine of the 24 students stated that they would like writing classes more if they were able to share and discuss with their friends in small groups. Another theme with eight students voicing the same idea was having the freedom to write about their own choice of topics. The third theme was choosing to share their work,
rather than feeling as though they had to. Though only four students stated this as a reason, they all discussed that their discomfort in writing stemmed from a fear of having to share something that might be too personal.

**Single-gender groupings**

The following are the results from the second anonymous survey given in June. Again, the scale is 1 (not at all) and 5 (a lot, or all the time).

![Bar chart](image)

**Figure 2.1 How comfortable did you feel in the single gender group?**

Overall there was a sense of comfort in the single gender groups, with only 1 of the 24 students feeling less than somewhat comfortable. Because this is a group of students who have been together in the same class for eight years, there was a large comfort level to begin with. However, despite the lack of hard evidence to support an increase in comfort levels, student comments, both during class time and in the long answer section of the surveys, indicate the single-gender groupings to be a success. Many students discussed that the gender groups were more relaxed and fun. Two of the boys even commented on getting each other's "guy humour"
in their survey responses. The girls appreciated the quiet atmosphere and one even stated:

"Without the boys we got way more done" (female participant, survey 2).

In fact, there were only two major themes in the responses for the question: "How did you feel during the single gender classes?" which was asked in the second anonymous survey. The first theme was that the students simply enjoyed being with their gender. Nineteen answers in this category all focused around a feeling of being relaxed and understanding the needs of the others' in the group. For example, the girls were able to be quiet and accomplish more, while the boys appreciated being able to be "a little silly" (male participant survey 2) with no girls "who take it so seriously" (male participant, survey 2). The second category grouped together all the students who discussed their comfort level. Nine of the 24 students explicitly wrote, "it was more comfortable." A feeling of mutual understanding and less fear around judgment were the primary reasons given for an increased feeling of comfort.

As the graphs in this section will show, the increase in comfort also led to an increase in participation and sharing of work, along with a decrease in off-task behaviour.

Figure 2.2 How much did you like sharing your work in the single gender group?
As a result of increased comfort levels in the single gender groups, it is evident that there is a high level of sharing in the single gender groups. This graph indicates that 16 of 24 students liked sharing their work most of the time or better.

![Bar graph showing number of students with scale 1 to 5]

**Figure 2.3 How much did you enjoy participating in the writing activities with your single gender group?**

Figure 2.3 indicates a high level of interest during the various writing activities. While talking with the students during the writing activities, it was obvious that they enjoyed the chance to “just be themselves” (taken from field notes on May 12). Students worked well in their gender groups and I noted on June 2 that there was almost no need for classroom management. When given the task, the students immediately got to work. Further to this, the students themselves noticed an increase in the on-task behaviour of the group. One of the boys commented to me “This is great, I’m laughing with the guys but I’m still working” (male participant, field notes, May 12).
Comparing the Mixed-gender and Single-gender Groups

Using information from both surveys, I compared the answers that focused on their comfort levels and their attention during the various writing lessons.

Figure 3.1 How comfortable do you feel sharing your work?

There is a notable increase in the comfort levels of the students. As previously stated, there was a high level of comfort with this group before beginning this project; however, the data shows a shift with those who only felt somewhat comfortable at a 3 to being mostly comfortable at a 4. Sixteen of the 24 participants marked themselves as a 4 or 5 in the single groups for comfort, compared to only 9 in the mixed-gender groups.
With regards to listening during writing lessons, there was little change between the two groups. This could be attributed to the fact that it was a very high achieving group of students to begin with where there was little room to improve on these values.

The following graphs compare boys and girls in the areas of participation (on-task behaviour), off-task behaviour and voluntarily sharing their work.
Figure 4.1 Participation (on-task behaviour) levels during 11 lessons

Figure 4.1 shows little change in the amount of participation, or on-task behaviour; however, of note is the overall difference between the participation levels of the girls and the boys. Over the entire project, the girls had a higher participation than the boys, and this did not change when the genders were separated.
In Figure 4.2 it is very interesting that the two groups are almost identical in their level of engagement with the lesson. This, I believe, is directly related to the topic of the lesson. When allowed to write on more fun topics, such as "high school" (lesson 7) and a free write (lesson 10) there is a marked decrease in off-task behaviour as their engagement with the topic and, thus lesson, increases. Further to this, as the groups became more accustomed to the single-gender format and the novelty of being able to work with their friends wore off, they were better able to engage in the lessons and subsequent activities.

I noted on May 12, a single gender lesson, that "the students needed no monitoring at all and were absorbed in their writing." The following graph also notes a spike in their willingness to share their writing during these two lessons. In the first survey, the students noted that they appreciated the freedom to write on topics of their choice, and in the second survey, a few students commented on not liking having to write on only serious stuff.

Figure 4.3 Voluntary sharing of work during the 11 lessons
The three spikes in the sharing of their work are related to the happier, more relaxed writing assignments, while the dips in the graph are for those lessons where the students were asked to write on very personal and emotional topics. The first dip, lesson 3, was about the saddest day of their life. Only those students who enjoyed sharing their writing on a regular basis were willing to share during the activity. Another dip (more so for the girls) was lesson 8 which focused on the scariest moment. This lesson is a good example of how some topics speak more to one gender than the other. The boys enjoyed exaggerating their stories and making them into Halloween-type tales, where the girls wrote more on being scared by an older brother or seeing a spider.

The high points, lesson 4 (happiest day), lesson 7 (high school) and lesson 10 (free write) were lessons where the students were able to write about common feelings they shared with many of their classmates and therefore felt less of a risk to share those ideas and emotions. I believe that many of them felt they could relate to one another on the level of a new bike or kitten, whereas, perhaps many did not feel that same kinship with regards to the loss of a loved one or a divorce.

CONCLUSION

Discussion

Based on the two surveys and participation tallies, I was able to determine that engagement and participation increased in their single gender groups, while their willingness to share was related more to the topic. From reading their responses to the questions in the second anonymous survey and from my observations and discussions with the group, it is my opinion that the single-gender groups were a positive experience. Not only were we able to try some more in-depth writing that perhaps would not have been attempted in the regular writing
classroom, but I also noticed an increase in confidence and engagement from all the students.

Some key points worth noting are that the students enjoy having a choice of writing activities and appear to perform the best and feel the most comfortable and engaged when given the chance to write on a topic that not only interests them, but that they can relate to. This, of course, is not a new idea in the world of Language Arts, but I noticed a marked decrease in off-task behaviour and a higher willingness to share the writing when the students were given the choice of their writing topic.

Though further investigation would need to occur before I would state as fact that boys prefer a particular genre over another, I did notice much more action and violence in the boys' writing, and a marked difference in the descriptive and emotional detail that the girls were willing to share. As Argamon et al. (2003) noted in their study, "females tend to talk about relationships more than boys do" (p. 322). They also saw through their project that boys and girls write very differently as they have very different views on the world. Further to this, the students also performed better when a lighter topic was suggested, rather than a deeply personal subject. I learned through this research that it is not reasonable to ask for students to share their most personal moments because they have a right to keep those thoughts to themselves. It is unrealistic to believe that five weeks in a single-gender group would create the type of atmosphere necessary for students to feel safe enough to discuss intimate feelings. Though Luce-Kapler (1999) was able to create such an environment, she was able to do so over the period of a year and with a group of students who chose to be in a writing club. It would be interesting to see if this project had been extra-curricular whether that would have an effect on the outcomes.

If the goal is to encourage more personal writing and greater willingness to share writing,
it would be best to start with lighter, easier topics to create the level of trust necessary in order for the students to share their innermost thoughts. Topics could include ideas around their happiest day, best Christmas present or a fun birthday party. It would be important for the topics to be relatable and universal. Even though this particular group of students had been together for eight years, it is still asking too much to expect a 12 year old girl to talk about her deepest fear or saddest moment, even when in her gender peer group. Though I was hoping to inspire such emotion through this project, I have realized that that type of writing could only come after a long time of being together in the single-gender group and only after that trust had been established through lighter topics.

Limitations

Overall my study was a success, but there were certainly limitations to the type of action research I conducted. Because this was only one study conducted in one classroom it is difficult to draw any definitive conclusions. It would be interesting to implement this type of study over several classrooms, grade levels and schools to see if any trends in the data could be correlated. Further to this, the fact that this group had been together for many years and had already developed strong relationships could explain why there were no significant increases in engagement in single gender groups. Again, looking at classes where students do not already have previous relationships might result in more noticeable differences.

I would like to take this study one step further and look more closely at the types of writing that the boys and girls were engaged with to see if assigning different topics would have had an even greater effect on the participation and sharing levels within the groups. The time constraints were not conducive to such analysis, but it would be of interest to look at not only how the writing changed over the course of the study but also what genres the genders preferred.
As previously mentioned, I was only able to draw only general conclusions about the types of writing the boys and girls seemed to prefer.

**Implications**

Practical implications for the classroom based on this study could be grouped in two categories: 1) What to write, and 2) Who to write with.

It became apparent to me over the course of my research, and especially in analyzing the written answers to the survey questions, that students need the space and freedom to write as they choose. Of course, curriculum dictates the necessary genres that must be covered, but by giving students some choice in topic, I believe a great increase in the quality and engagement in the activity would become obvious. Furthermore, many students discussed how they would enjoy writing more if it wasn’t always for assessment purposes or for sharing. Perhaps removing some of the pressure for good grades on their writing would in turn give them the freedom to take risks and experiment, which could ultimately lead to a greater confidence in their writing.

The second theme, who to write with, also plays an important role in the writing process. I noticed more engagement when the students were able to bounce ideas off their peers, both in the mixed-gender groups and the single-gender groups. I noted in my field notes on March 3 for instance, that though the classroom seemed quite noisy, listening to various conversations revealed the students to be on task and engaging in the writing process. In their written responses, a great majority named being able to write with their friends as a large motivator for them. In the single-gender groups, when allowed to share their writing and work together, I noticed a more comfortable and positive atmosphere where the flow of ideas was integral to the writing process.

Much more research is needed on issues related to gender and education. It could be that
more than a century spent trying to equalize the genders has created a fear amongst researchers to re-open the great debate. But it is imperative that we, as educators, ensure that we are doing all we can to generate the success we need from our students. Though single-gender education may not be the only answer, seeking alternatives to current practices and learning to better engage our students in their learning will be the key to the success of our society as a whole.
REFERENCES


Example of Tally sheet used during observation

**Date:** March 3  
**Activity:** Jane teaching intros and conclusions

**P-** participating effectively  **S-** shares with the group  **X-** off task

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<thead>
<tr>
<th>Boys</th>
<th>Girls</th>
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<tr>
<td>Cameron</td>
<td>Jada</td>
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<tr>
<td>pppp</td>
<td>xppp</td>
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<tr>
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<td>Julia</td>
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<td>xppp</td>
</tr>
</tbody>
</table>
Survey #1 for Mme Reid

I am    a boy    a girl

1. On a scale of 1-5, how comfortable do you feel sharing your writing in front of the class?


2. On a scale of 1-5, how comfortable are you writing about personal feelings or experiences?


3. On a scale of 1-5, how well do you pay attention during writing activities?


4. If you answered 1, 2 or 3, why don't you pay attention?

a. It's boring
b. I don't understand
c. It's too hard
d. I don't like writing and don't like learning about it
e. Other:

5. What I like about sharing my writing:


6. What I don't like sharing about my writing:
7. I would feel more comfortable participating in writing activities if:

8. I would enjoy writing more if:
Survey #2 for Mme Reid

I am  a boy a girl

1. On a scale of 1-5, how comfortable did you feel in the single gender group?
1  2  3  4  5
not at all  a lot

2. On a scale of 1-5, how much did you like sharing your work with your gender group?
1  2  3  4  5
not at all  a lot

3. On a scale of 1-5, how much did you enjoy participating in the writing activities with your gender group?
1  2  3  4  5
not at all  a lot

4. On a scale of 1-5, how much do you feel your writing has improved by working with your gender group?
1  2  3  4  5
not at all  a lot

5. On a scale of 1-5, how much did you pay attention during the lesson when with your gender group?
1  2  3  4  5
not at all  a lot

Please give a reason for your answer

6. What I liked about working with my gender group:
7. What I didn't like about working with my gender group: