# Impact of Single-sex Instruction on Student Motivation to Learn Spanish 

Dr. Scott Kissau<br>University of North Carolina at Charlotte<br>Dr. Lan Quach<br>University of North Carolina at Charlotte<br>Dr. Chuang Wang<br>University of North Carolina at Charlotte


#### Abstract

To increase male motivation to learn additional languages studies have suggested teaching males in single-sex second and foreign language classes (Carr \& Pauwels, 2006; Chambers, 2005). Despite the reported benefits of this unique arrangement, a review of literature found no related research conducted in Canada or the United States. To address this lack of research, a study was conducted in the spring of 2008 to investigate the impact of single-sex instruction on student motivation to learn Spanish. Using Gardner's model of second language motivation (1985), 57 high-school students studying Spanish in either single-sex or coeducational classes completed a pre and post questionnaire to gauge their motivation to learn the language. Follow-up interviews were also conducted with both students and teachers. Results indicated that while both sexes enjoyed some educational advantages from the single-sex environment, the benefits appeared to be greater for the males than the females.

\section*{Résumé}

Afin d'accroître la motivation des garçons pour l'apprentissage des langues, certaines études ont suggéré d'enseigner les langues secondes ou étrangères à des classes de garçons exclusivement (Carr \& Pauwels, 2006; Chambers, 2005). Malgré le bénéfice confirmé d'un tel contexte, il n'existe aucune recherche similaire connue sur ce sujet au Canada ou aux États Unis. Pour remédier à cette lacune, on a conduit au printemps 2008 une étude portant sur l'impact de l'enseignement non mixte sur la motivation des élèves à apprendre l'espagnol. Selon le modèle de Gardner quant à la motivation dans l'apprentissage d'une langue seconde (1985), 57 élèves au niveau secondaire apprenant l'espagnol dans des classes mixtes et non mixtes ont rempli avant et après le cours, des questionnaires destinés à mesurer leur motivation. Le suivi a été assuré par le biais d' entrevues avec élèves et professeurs. Les résultats montrent que si les élèves des deux sexes bénéficiaient d' un environnement éducatif non-mixte, les garçons semblaient en tirer plus d'avantages.


## Introduction

The absence of boys in advanced-level foreign and second language classrooms continues to be a problem plaguing English-speaking countries around the world. Studies ${ }^{1}$ conducted in Canada, for example, have drawn attention to the under-representation of boys in French as a second language ${ }^{2}$ classes (Kissau, 2006; Netten, Riggs, \& Hewlett, 1999). Lack of motivation amongst English-speaking boys to study other languages is not, however, a problem unique to Canada. Several recent studies coming out of the United States, England, and Australia have also provided a growing amount of data demonstrating adolescent males to be under-represented in advanced-level foreign language classes and lacking motivation, in comparison with their female classmates, to pursue learning another language (Carr \& Pauwels, 2006: Heining-Boynton \& Haitema, 2007; Jones \& Jones, 2001; Pavy, 2006; Williams, Burden \& Lanvers, 2002).

Although numerous explainations have been suggested for the general lack of male interest in language learning (Carr \& Pauwels, 2006; Jones \& Jones, 2001; Kissau, 2006), a common theme that emerges relates to traditional views of masculinity. Carr and Pauwels (2006), for example, found that many boys perceive the study of foreign languages to be effeminate in nature, and as a result steer away from such courses. Supporting this claim, in his study involving 490 French as a second language students in Canada, Kissau (2006) suggested that many boys avoid studying French in high school for fear of being labeled gay. According to Cameron (2004), boys will often choose to avoid courses, like foreign languages, that are often thought to be more appropriate for females in order to assert their masculinity.

In response to such concerns, studies coming out of the United Kingdom and Australia investigating the lack of male interest in foreign language studies have recommended teaching second and foreign languages in single-sex classes (Carr \& Pauwels, 2006; Chambers, 2005). In these studies it was suggested that in single-sex classes, boys would be free from not only the burden of differentiating themselves from their female classmates, but also from the pressure to impress the opposite sex. In the following article the researchers summarize the findings of research related to single-sex second and foreign language instruction and provide a detailed account of their study investigating the impact of single-sex instruction on student motivation to learn Spanish.

## Single-sex instruction

Experimentation with single-sex classes in an attempt to raise male and female test scores in a variety of subject areas has in the past produced mixed results. A comprehensive review of

[^0]literature on the effectiveness of single-sex instruction by the US Department of Education revealed that roughly a third of all studies reported academic benefits in math, science, English, and social studies. The remainder of the studies, however, reported no advantages and even disadvantages of single-sex instruction (US Department of Education, 2005). Behavioral problems, for example, were found to be more problematic in middle school single-sex classes (US Department of Education, 2005) than they were in coeducational classes.

While studies involving core subject areas like math, science, and English have not always shown this teaching arrangement to benefit students, research focusing specifically on single-sex foreign language instruction has been more consistent in reporting positive findings (Barton, 1998, 2002; Chambers, 2005; Cheng, Payne \& Witherspoon, 1995). Analysis of standardized test scores in British secondary schools, for example, has demonstrated that while all-boys schools attain lower levels of achievement overall than do coeducational schools, their grades in the foreign language classroom are considerably higher than those achieved by students in co-ed schools (Barton, 2002). In addition to improved test scores, studies have demonstrated the motivational benefits of single-sex foreign language instruction. In the absence of the opposite sex, language learners often report to be more interested in the topic, more confident in their abilities, and less anxious in the foreign language classroom (Barton, 1998, 2002; Chambers, 2005; Mireylees \& Thomas, 1998).

Research investigating the motivational differences between males and females in both second and foreign language classrooms suggests that one reason behind the reported lack of male motivation is the pressure many boys feel to differentiate themselves from females (Carr, 2002; Carr \& Pauwels, 2006; Kissau, 2006). Researchers (Barton, 1998, 2002; Chambers, 2005) have found that boys have a tendency to avoid courses or specific content perceived to be feminine in nature. As a result, content areas like foreign languages suffer low male enrollment. In single-sex classes, researchers like Chambers (2005) and Barton $(1998,2002)$ suggest that adolescent boys feel less need to differentiate themselves from their female peers, and therefore less pressure to pursue strictly the "masculine" subjects like math and science.

Results from the study by Carr and Pauwels (2006) indicated that boys are freer to be themselves in single-sex foreign language classrooms. The boys in the study were more focused on their work and less occupied with impressing their female counterparts. Without the presence of girls, the boys were also found to participate more and to be more successful in their French classes.

Much of the success experienced by the boys in the study by Carr and Pauwels (2006) was attributed to the teaching style of the teachers. Recent studies investigating male participation in second and foreign language classrooms have drawn attention to growing male dissatisfaction with traditional teaching practices (Carr, 2002; Carr \& Pauwels, 2006, Jones \& Jones, 2001; Kissau, 2006; Williams et al, 2002). A study by Chavez (2000), for example, investigating the effects of sex of the student on student interaction in a foreign language environment reported that while females prefer peer interaction and cooperation in the classroom, male students enjoy teacher-led classrooms that emphasize competition over cooperation. The results also indicated that male students were more reluctant to work in groups than were females. In response to such claims, Mireylees and Thomas (1998, October 9) have
argued that single-sex classes allow teachers to tailor teaching strategies and lessons to address the needs and interests of boys.

It has also been suggested that boys in single-sex classes may be less anxious about speaking in the target language without the presence of females. Several studies have established a link between anxiety and motivation to learn another language (MacIntyre \& Gardner, 1991; MacIntyre, Baker, Clément \& Donovan, 2002). Adolescent boys are very conscious of how they are perceived by females. In the absence of the opposite sex, boys may be less self-conscious and more at ease to speak in the target language without fear of how they appear in the eyes of girls.

Research by Barton (1998) supports the above claims. While investigating teaching strategies that boost male motivation to learn a foreign language, the researcher found that boys taught in a single-sex classroom had a more positive perception of foreign language learning and were more likely to continue with foreign language instruction. The most frequently cited reason for liking the arrangement was the absence of distractions and fewer feelings of embarrassment. More recently, in a study by Chambers (2005) it was reported that male participants were less embarrassed in the absence of girls and could talk to each other in the target language "without feeling stupid" (p.50).

An additional benefit to boys in single-sex classes is that these classes are usually taught by males. Researchers have found that having male teachers often provides boys with positive male role models within the traditionally female-dominated school context (Gold \& Reis, 1978). As previously reported by Kissau and Turnbull (2008), a recent survey conducted by the Elementary Teachers' Federation of Ontario (2006) reported that of the 2341 teachers who selfidentified as French as a second language (FSL) teachers, only 247 were male (10.7\%). A report coming out of California found that only $28 \%$ of foreign language teachers in that state are male (Sung, Padilla, \& Silva, 2006). The presence of male foreign and second language teachers in single-sex classes may help alleviate the perception that language study is not appropriate for males and thus may serve to raise motivation amongst male students.

In order to be effective, however, single-sex second and foreign language classes need to be of benefit to both sexes. The advantages described above, enjoyed by male students, must not come at the expense of their female peers. Study results indicate that females, too, stand to gain from single-sex second and foreign language instruction. Barton (2002) found that $89 \%$ of the girls in her study that were taught in single-sex classes earned an A in their standardized high school foreign language exam compared with only $48 \%$ of the girls in the co-ed classes. Furthermore, the girls in the single-sex foreign language classes often reported that they could better relate to and empathize with their female teachers (Barton, 2002). Most of the girls felt that they worked better in single-sex groups, and many criticized their male counterparts' immaturity, noisiness, and lack of concentration (Barton, 1998, 2002).

It should be noted, however, that not all research results involving single-sex foreign language instruction have been positive. Several studies have demonstrated that teaching in allmale foreign language classrooms can be a difficult experience for teachers (Barton, 1998; Carr, 2002; Chambers, 2005; Younger \& Warrington, 2002). Eighty-five percent of the boys in a study by Chambers (2005) agreed that the behavior in their foreign language classes had worsened since the introduction of single-sex instruction. Chambers also reported that female students in all-girls classes could have "their bad days" (p.51). While the boys tended to be overly loud in
their all-male classes, Chambers (2005) found that girls in single-sex groupings could be more malicious and nasty to their female peers.

As school districts work to raise test scores, the number of single-sex schools and classes will continue to rise. In fact, a recent report issued by the US Department of Education indicated that the number of single-sex public schools in the United States is anticipated to grow (US Department of Education, 2009). As an example of such growth, in 2002/2003 only 16 public schools in the United States offered any kind of single-sex educational opportunities. In 2007-2008, more than 300 public schools offer single-sex classrooms (National Association for Single Sex Public Education, 2008). As interest in learning additional languages continues to rise and awareness of the gender gap in second and foreign language education continues to grow, so too will the presence of single-sex language classes. However, despite growing interest in singlesex education in the United States (US Department of Education, 2008) and the suggested benefits to be had by both males and females in the foreign language classroom via such instruction, an extensive review of literature failed to uncover any study that has investigated the effects of single-sex foreign or second language instruction in North America. Compounding this lack of research, findings from the previously mentioned international studies are inconclusive. While many studies point to the benefits of single-sex foreign language instruction, others report disadvantages associated with the arrangement. There is clearly a need to better understand the effects of single-sex second and foreign language instruction in North America, particularly as school districts across Canada and the United States attempt to increase male and female participation in advanced-level second and foreign language programs. In fact, in a recent article by Kissau and Turnbull (2008) focusing on the under-representation of boys studying French in Canada, the authors specifically call for greater research in the area of single-sex language instruction in order to better understand and improve male participation in both second and foreign language programs. In this article, the authors investigate if single-sex instruction has a positive impact on student motivation to study Spanish.

## Model of second language motivation

Gardner's (1985) influential model of second language motivation was used in this study. Second language motivation, as described in this model, is composed of three sub-constructs: motivation, language learning orientation, and attitudes toward the learning situation. With respect to the first component, motivation, a motivated individual would have the desire to learn the target language, would display the necessary motivational intensity or effort to learn the language, and would also have favorable attitudes toward the language. According to Gardner (1985), in addition to being motivated to learn a second or foreign language, students should also have a reason for learning the language. This reason represents the second component of Gardner's model, language learning orientation. Students' reasons for studying another language were classified by Gardner (1985) as either integratively or instrumentally oriented. Students were considered integratively oriented if they were learning the language in order to communicate with or better understand members of the target language community, and instrumentally oriented if they were primarily interested in learning the language for careerrelated benefits. The third and final component of Gardner's model, attitudes toward the
learning situation, deals specifically with students' evaluations of the second or foreign language course, the second or foreign language teacher, and the second or foreign language teacher's competence. Several studies investigating student attitudes toward learning another language have demonstrated that when students have positive evaluations of their second or foreign language course and their second or foreign language teacher they tend to be more motivated and to work harder (Diffey, Morton, Wolfe, \& Tuson, 2001; Jones \& Jones, 2001).

While discussing Gardner's influential model, it should, however, be acknowledged that it has, in recent years, received criticism. Several researchers have commented that the model is not comprehensive and fails to take into account the changing nature of one's motivation (Norton, 2000; Peirce, 1995; Siegel, 2003). Peirce (1995) and Norton (2000) have argued that Gardner's model views motivation as static and as a fixed trait that does not take into consideration fluctuating desires to learn another language. Other researchers (Crookes \& Schmidt, 1991; Oxford \& Shearin, 1994) have argued that Gardner's model is too focused on societal influences, such as attitudes toward the target language community, and pays little attention to classroom-related factors that may influence one's language learning motivation. Dörnyei and Murphey (2003), for example, argued that Gardner's model neglects the influence of group dynamics which according to the researchers is of particular relevance in second and foreign language classrooms where an emphasis is often placed on interaction among students. The researchers' assertion was that a strong, cohesive group in the target language classroom can have a significant impact on student motivation to learn the language.

Despite such criticism, recent research continues to support the influence of Gardner's model. For example, in a 2006 study by Kissau that investigated gender differences in motivation to learn French amongst approximately 500 Grade 9 students in Canada, the results indicated that at the root of many gender differences were societal influences. Despite using a more comprehensive approach to second language motivation that incorporated both societal and classroom-related factors, Kissau acknowledged that the qualitative data gathered in the study seemed to be drawing attention back to the power of Gardner's model. It became apparent in the study that societal factors, emphasized in Gardner's model, such as attitudes toward the target language were more influential than classroom-related factors.

## Method

## Participants

Several months prior to commencing the study, the principal of the participating high school was approached by one of the researchers and invited to participate in the research opportunity. A condition of participation was that the school arrange introductory level Spanish classes (Level 1) in both single-sex and coeducational settings. The high school was located in an urban setting in the southeastern United States, and had a large population, with over 2100 students of diverse ancestry. Approximately $70 \%$ of the students were African-American, while the remaining student population consisted primarily of Caucasian (14\%), Asian (6\%), and

Hispanic (8\%) students. More than two-thirds of the students received free/reduced lunch ${ }^{3}$, and approximately $8 \%$ were deemed Limited English Proficient ${ }^{4}$.

Of the 105 students that were enrolled in the four different Level 1 Spanish classes at the time of the study, 57 agreed to participate. The response rate was approximately $54 \%$. Twentysix of the participating students were male and 31 were female. The percentage of participants being taught in single-sex classes ( $56 \%$ ) was relatively similar to the percentage taught in coeducational classes ( $44 \%$ ). A total of 32 participants ( 16 males and 16 females) were taught in a single-sex class and 25 ( 10 males and 15 females) were taught in a traditional, coeducational class. Only 16 of the 57 students were taught Spanish by a female teacher and the remaining 41 students had a male teacher. Of the 57 student-participants, 33 ( $58 \%$ ) reported to be AfricanAmerican, 15 (25\%) were Caucasian, four (7\%) were Asian, and two (4\%) were Latino. An additional two students (4\%) reported to be of mixed race and one student ( $2 \%$ ) reported to belong to another ethnicity. Although the ages of the student-participants varied from 14 to 18 , the large majority of these students were 14-15 years old (86\%).

Sixteen of the 57 student-participants ( 8 females and 8 males) were selected to participate in follow-up interviews. Stratified random sampling with different probabilities of selection was used to select these students in order to ensure that both sexes, as well as single-sex and coeducational classes, were equally represented. In other words, four females from the all-girls class, four males from the all-boys class, four females from the co-ed class, and four males from the co-ed class were interviewed. Of these 16 students, 8 were planning to continue studying Spanish throughout high school (4 males and 4 females), 2 (both males) were intending to drop Spanish after completing the two mandatory years of foreign language instruction, and 6 students had not yet decided ( 2 males and 4 females).

The two teachers who taught the single-sex and co-ed classes were also interviewed separately. Both teachers were under the age of 35 and had less than five years of experience teaching. One teacher was a male, native-speaker of Spanish from Mexico and the other was a female, African-American with strong Spanish-speaking skills. The female teacher taught the allgirls class in addition to two advanced level Spanish co-ed classes. The male teacher taught the all-boys class and both co-ed classes. The two teachers had equal amounts of post-secondary education, comparable foreign language teacher training, and both consistently spoke Spanish in the classroom.

Both students and teachers of Level 1 Spanish were asked to participate. Teachers were asked to participate in order to help explain and elaborate on the results obtained from the student questionnaires. Level 1 Spanish classes were chosen for a variety of reasons. Student
${ }^{3}$ The term free/reduced lunch refers to a free or reduced price lunch provided to students unable to pay the full price for meals. Children from households that meet federal guidelines are eligible for free or reduced-price meal services under the National School Lunch and School Breakfast programs (US Department of Agriculture, 2009).
${ }^{4}$ English language learners in the United States who are at beginning to intermediate levels of proficiency in the language are often referred to as Limited English Proficient (Peregoy and Boyle, 2008).
enrollment is the highest in introductory Spanish classes, such as Level 1, and can therefore support offering both single-sex and coeducational classes (Draper \& Hicks, 2000). Furthermore, studies have shown that adolescent students, such as those commonly found in Level 1 Spanish, tend to express negative attitudes toward learning another language (Dörnyei \& Clément, 2001; Kissau, 2006; Williams et al., 2002).

## Instrument

Quantitative data were collected from the student-participants with the use of a questionnaire. The questionnaire was administered as a pre-test at the beginning of the spring semester of 2008 and then again as a post-test four months later. In both cases, the questionnaire was administered by one of the researchers without the teacher present in the classroom. Students were to circle a number on a seven-point Likert scale that best represented their response to statements pertaining to the motivational factors ( $7=$ strongly agree, $1=$ strongly disagree). Items included in the questionnaire were drawn from the Attitude Motivation Test Battery (AMTB) (Gardner, Clément, Smythe, \& Smythe, 1979). Information pertaining to each measure, including Cronbach's alpha reliability coefficients, as provided by Gardner et al. (1979), is provided below in parentheses. A 7-point scale was used in the study to align with the AMTB, and has been administered to adolescent language learners in numerous studies.

The AMTB was designed to measure for Motivational Intensity ( 0.82 ), Desire ( 0.89 ), Attitudes toward Spanish (0.94), Integrative Orientation (0.86), Instrumental Orientation (0.83), Teacher Evaluation ( 0.92 ) and Course Evaluation ( 0.88 ), and Teacher Competence (.86). Although the items appeared randomly in the questionnaire, they are grouped by construct in Appendix A to facilitate reader comprehension.

## Interviews

Qualitative data were gathered from students and teachers via semi-structured interviews that were conducted individually with each participant. Questions asked of the participants were intended to elaborate and build upon the findings from the surveys. With respect to both student and teacher interviews, participants were asked to describe their experience studying or teaching in coeducational or single-sex foreign language classrooms. They were also asked to discuss advantages or disadvantages, if any, that they felt were associated with the two settings. Students were also asked to describe their experience being taught by a male or female foreign language teacher. Due to the open-ended nature of the questions, the length of each interview varied considerably. Some students and teachers were very vocal about their experiences and as a result their interviews were up to 30 minutes in length. Others had very little to say and their interviews often lasted less than 10 minutes. All interview data were transcribed. Both interview notes and transcriptions were analyzed for common themes.

## Data analytical procedure

Using Gardner's model of second language motivation, the researchers calculated a total motivation score to learn Spanish (total L2 motivation). In addition, the three constructs that make up the total L2 motivation score 1) Motivation (Motivational Intensity, Desire and Attitudes toward Spanish), 2) Language Learning Orientation (Integrative and Instrumental Orientations), and 3) Attitudes toward the Learning Situation (Course and Teacher Evaluations and Teacher Competence) were individually examined and analyzed.

Repeated measures Analysis of Variance (ANOVA) was used to examine the total L2 motivation score at the beginning and the end of the course. A doubly multivariate repeated measures ANOVA was used for the three sub-constructs of students' motivation to learn Spanish: Motivation, Language Learning Orientation, and Attitudes toward the Learning Situation. Posthoc multiple comparisons with Scheffe's method were conducted when statistically significant differences were noticed among groups of students. Bonferroni adjustment was employed to compare main effects and simple effects. Effect size (partial $\eta^{2}$ ) was reported for each statistical result.

## Results

## Survey results

Descriptive statistics for all dependent variables classified by independent variables (student gender, teacher gender, and classroom type) are presented in Table 1

Table 1
Means and Standard Deviations of Each Dependent Variable for All Independent Variables


Note. MIDA = Motivational Intensity, Desire and Attitudes toward Spanish; LLO = Language Learning Orientations; and ALS = Attitudes toward the Learning Situation.

Descriptive statistics in Table 1 indicate a decrease in the students' total L2 motivation, as well as in all sub-constructs of the total L2 motivation from pre-test to post-test. This decrease was confirmed with tests of within-subjects contrasts in repeated measures ANOVA, $F(1,53)=$ 21.02, $p<.001$, partial $\eta^{2}=.28$, as well as in doubly multivariate repeated measures ANOVA, $F$ $(3,51)=7.45, p<.001$, partial $\eta^{2}=.31$. Box's test of equality of covariance matrices suggested that the observed covariance matrices of the dependent variables were equal across the groups ( $p$ $=.23$ ). Wilks' lambda indicated both between-subjects and within-subjects statistically significant multivariate differences ( $p<.001$ ). Multivariate between-subjects tests showed statistically significant differences on the three sub-constructs of the total L2 motivation score with respect to (a) student gender, $F(3,51)=6.76, p=.001$, partial $\eta^{2}=.29$; (b) teacher's gender, $F(3,51)=6.75, p=.001$, partial $\eta^{2}=.28$; and (c) classroom type, $F(6,102)=5.01, p<$.

001 , partial $\eta^{2}=.23$. The results of tests of between-subjects effects for the students' total L2 motivation and sub-constructs of the total L2 motivation will be presented separately in the following paragraphs.

## Total L2 motivation.

No statistically significant differences were noticed between male and female students on their total L2 motivation, $F(1,53)=0.05, p=.83$, partial $\eta^{2}=.001$, and no statistically significant time and student gender interaction was noticed either, $F(1,53)=0.01, p=.93$. Similarly, no statistically significant differences were noticed on their total L2 motivation when the sex of the teacher was considered, $F(1,53)=0.02, p=.89$, partial $\eta^{2}<.001$. No statistically significant time and teacher gender interaction was noticed, $F(1,53)=3.34, p=.08$. Type of class (co-ed, all-boys, all-girls) was not found to be a significant factor either, $F(2,53)=0.08, p$ $=.93$, partial $\eta^{2}=.003$. No statistically significant time and classroom type interaction was noticed, $F(1,53)=0.20, p=.65$.

## Motivation (motivational intensity, desire, and attitudes toward Spanish).

Students' motivation dropped significantly from pre-test to post-test, $F(1,53)=13.46$, $p=.001$, partial $\eta^{2}=.20$. No statistically significant differences were noticed between male and female students, $F(1,53)=2.19, p=.15$, partial $\eta^{2}=.04$. Similarly, no statistically significant differences were identified when sex of the teacher was considered, $F(1,53)=1.37, p=.25$, partial $\eta^{2}=.03$. Type of class (co-ed, all-boys, all-girls) was again not found to be a significant factor, $F(2,53)=1.44, p=.25$, partial $\eta^{2}=.05$.

## Language learning orientations (integrative and instrumental).

Students' language learning orientations dropped significantly from pre-test to post-test, $F(1,53)=12.72, p=.001$, partial $\eta^{2}=.19$. In other words, the students reported themselves to be less interested in learning Spanish for both communicative and career-related reasons at the end of the semester than they were at the beginning. Female students were found to be significantly more integratively and instrumentally oriented than male students, $F(1,53)=4.71$, $p=.04$, partial $\eta^{2}=.08$. No statistically significant differences were noticed between the male teacher and female teacher on their students' language learning orientations, $F(1,53)=3.28$, $p$ $=.08$, partial $\eta^{2}=.06$. Type of class, however, was found to be a significant factor, $F(2,53)=$ $4.24, p=.02$, partial $\eta^{2}=.14$. Post-hoc multiple comparisons with Sheffe's method revealed that students in the all-female class were significantly more interested in learning Spanish for the communicative and career-related benefits than were their peers in the all-male class ( $p=.03$ ). No statistically significant differences were noticed between students in the co-ed class and their peers in the all-boys class $(p=.08)$ or in the all-girls class $(p=.67)$.

## Attitudes toward the learning situation (teacher and course evaluations and teacher competence).

Students' evaluations of their Spanish course, Spanish teacher, and their respective teacher's competence when combined dropped significantly from pre-test to post-test, $F(1,53)=$
20.14, $p<.001$, partial $\eta^{2}=.28$. No statistically significant differences were noticed between male and female students, $F(1,53)=3.94, p=.05$, partial $\eta^{2}=.07$. However, students taught by the male teacher had more positive attitudes toward the learning situation than students taught by the female teacher, $F(1,53)=5.40, p=.02$, partial $\eta^{2}<.09$. Type of class (co-ed, all-boys, allgirls) was also found to be a significant factor, $F(2,53)=3.48, p=.04$, partial $\eta^{2}=.12$. Post-hoc multiple comparisons with Sheffe's method revealed that students in the all-female class had significantly lower evaluations of their Spanish course, their female Spanish teacher, and their Spanish teacher's competence when combined in comparison to their peers in the all-male class ( $p=.04$ ). No statistically significant differences were noticed between students in the co-ed class and their peers in the all-boys class $(p=.49)$ or in the all-girls class $(p=.23)$.

Finally, comparisons were made between the boys in the co-ed class and the boys in the all-boys class and between the girls in the co-ed class and the girls in the all-girls class. No statistically significant differences were noticed between the boys in the co-ed class and the boys in the all-boys class on the total L2 motivation, $F(1,23)=0.04, p=.84$, or on the three subconstructs of the total L2 motivation (motivation, language learning orientations, and attitudes toward the learning situation), $F(3,21)=2.14, p=.13$. No significant time and classroom type interaction effects were noticed either, $F(3,21)=0.04, p=.99$. No statistically significant differences between the girls in the co-ed class and the girls in the all-girls class were noticed either on the total L2 motivation, $F(1,30)=0.11, p=.74$, or on the three sub-constructs of the total L2 motivation, $F(3,28)=1.57, p=.22$. An interaction effect, however, was observed between time and classroom type, $F(3,28)=3.75, p=.02$. Univariate analysis revealed that the girls' attitude toward the learning situation in the co-ed classroom did not drop significantly from the pre-measure $(M=5.23, S D=1.13)$ to the post-measure $(M=4.94, S D=1.05), t(16)=1.61$, $p=.13$, but the girls' attitude toward the learning situation in the all-girls classroom did experience a statistically significant drop from the pre-measure ( $M=5.02, S D=1.35$ ) to the post-measure $(M=4.12, S D=1.25), t(14)=4.79, p<.001$.

## Qualitative Data

The qualitative data obtained during interviews were successful in both shedding light on issues that were raised in the quantitative phase of the study and revealing interesting new findings that were less apparent in the survey results. For example, it was determined from the survey data that student motivation to learn Spanish decreased in all Level 1 Spanish classes, regardless of type of setting, over the course of the semester. It became clear, however, in the interviews that thoughts of the approaching summer vacation coupled with increasingly difficult concepts covered in class were largely responsible for this general wane in motivation.

Amidst the large amount of data gathered from the interviews, student and teacher responses to questions emphasized four main areas of interest. During discussions of their experiences in single-sex or coeducational Spanish classes, student and teacher comments frequently pertained to anxiety, focus in the classroom, student behavior, and sex of the teacher.

## Anxiety.

The words, "anxious," "nervous," or "shy" were mentioned by 11 of the 16 students interviewed when describing the advantages and the disadvantages of their respective classroom setting. Single-sex classes, as posited by numerous participants, relieve students of the pressure to impress the opposite sex. Three of the eight female participants agreed that in the absence of boys, girls are more relaxed and less embarrassed to participate in Spanish classes. One female from a single-sex class offered the following example:

I think that like being in the all-girls class, like, the girls were less anxious than we would have been if we were with boys. Because we weren't trying to like impress them and they weren't making fun of us. If boys had been in our class, the girls would have been really quiet, not wanting to get laughed at by the guys.

Anxiety-related benefits of single-sex classes seemed even more apparent to the boys. The majority of the male-participants ( 6 out of 8 ) emphatically stated that boys are nervous or shy around their female peers and for this reason would be more willing to participate in an allboys Spanish class. The phrase, "Not wanting to look stupid" was repeated on more than one occasion while explaining why boys are reluctant to speak Spanish in front of female classmates.

A very similar message was conveyed by the teachers. The male teacher, for example, believed that several of the male students in his co-ed classes were afraid of embarrassing themselves in front of the girls and thus were more anxious than were the boys in his all-boys class. According to the teachers, reduced levels of anxiety in single-sex classes resulted in more open and frank discussions in class.

## Focus.

The qualitative findings also drew attention to the level of student focus or attention in the classroom. Without any solicitation on the part of the interviewers, all but four of the 16 students stressed that there are fewer distractions in single-sex classes and that they were able or would be able, in the case of the co-ed students, to pay greater attention in class and get more work done in the absence of the opposite sex. Again, the finding was particularly evident amongst the males. Seven of the eight male participants concurred that males are more focused on their work without girls in the classroom. A boy in the single-sex class commented,

It feels like I learn better, and things move more smoothly without any like distracted talking. Like when I am in my other classes when boys talk to girls, they usually gossip about other people and start laughing and all that. But in this class, we don't really gossip that much.

This perception was corroborated by boys in the coeducational classes. Frequent references were made to boys wasting time flirting with girls. One male in a co-ed class made the following
remark: "In our class we have a bunch of guys that are trying to flirt with the girls and are not necessarily paying attention as much. That wouldn't happen in an all guys' class."

Several girls from both co-ed and single-sex classes agreed that there are more distractions with the opposite sex in the classroom. As exemplified in the following quote, these female students felt that disruptive male behavior can at times impede their academic progress: "I feel like I've learned more in this class than I would have if dudes were here acting stupid or saying stupid crap or whatever. We have good conversations about Spanish and other stuff."

An isolated, yet effective counter argument was brought forward by a female student in a coeducational class. This student felt that single-sex classes were unrealistic and failed to prepare students for the real word. She postulated, "Maybe I would be less distracted without guys around, but you have to learn how to get used to people, because not all in the world, you know, can be just one sex."

The male teacher supported the argument that in the absence of the opposite sex students are more able to focus on academics and improve their grades. References to "peacocks showing their feathers" and "boys impressing girls" suggested that his comments were primarily directed at male students.

The female teacher, however, was more sceptical that the single-sex environment positively impacted upon the achievement of her female students. "I mean, I have one girl in there and this is her second time taking Spanish 1. She failed in her mixed class and she is failing now too."

## Behavior.

During the interviews discussion of distractions and student focus in the classroom invariably led to various accounts of inappropriate student behavior. The four male and four female students taught in the coeducational classes all agreed that behavior in their respective classrooms was, at times, an issue. General consensus, however, was that it was "okay" and did not grossly interfere with instruction. While the male and female students in the co-ed classes were unanimous in this assessment, the remaining boys and girls that were interviewed had strongly contrasting perceptions of student behavior in their single-sex classrooms. Three of the four female students in the all-girls class stated in a matter-of-fact manner that the behavior in their class was "horrible." While the remaining female reported behavior in the all-girls class to be "good" her later comments suggested otherwise: "We're good, but sometimes we get out of hand and she has to send us out....We're not bad, we're not bad bad...We talk out, um, try to tell off the teacher, threats." These same girls described their female classmates as "loud" and "kicking attitudes."

Interestingly, the poor behavior exhibited by the females in the all-girl class came as no surprise to the girls in the coeducational classes. One student explained that she would prefer to be in a co-ed Spanish class for the following reason: "I wouldn't want to be in a class with all girls, because personally I don't really like hanging out with girls that much because they tend to gossip and talk about each other more. They're more catty." Another female in a co-ed class commented that whenever you put too many girls in the same room you are bound to have conflicts because girls are too emotional.

The boys in the all-male class, on the other hand, made many positive comments related to their general classroom behavior. While it must be acknowledged that the boys were initially very resistant to being in a class "with just guys," all four boys interviewed acknowledged the behavioral benefits of the unique arrangement. In addition to unanimously agreeing that they were quieter and more on task than they would have been if girls had been in the room, three of the four boys also commented on the sense of camaraderie that developed over the course of the semester. References were made to the boys agreeing on issues raised in class and helping each other when they did not understand a concept. When explaining why he felt boys in his class were more willing to participate than they would have been in the presence of girls, one young man commented:

Just because they felt more comfortable with their guys, their buddies. I've noticed there's a lot more bonding in this class, just like all the male students, you know. Let's just say you have a class of 10 males and 10 females. You are going to have a group of 4 or 5 male students that are like really close knit, you know. But in this class there's like, like everybody is sort of together, you know. Kind of friendly toward each other.

Further demonstrating the behavioral differences between the two groups, the female students in the all-girls class reported their classmates to be anything but supportive of each other. One such student said that she was reluctant to speak in her Spanish class because her female classmates were judgmental. Expressing a similar idea, another female stated, "Like if you say something. Like you could say the smallest thing wrong and the girls would be like, 'no, it's not like that,' and they'd have more attitude."

The female students in the all-girls class were keenly aware of just how different their behavior was from that in the all-boys class. As one such female reported, "Whenever I walk into the boys class, they were all quiet and doing their work, and they weren't really being loud or anything. Then when I came in my class, the girls were really loud...they just kept talking nonstop."

Not unlike the student data, data gathered from teacher interviews revealed sharply contrasting perceptions of male and female behavior in single-sex classrooms. While the male teacher made reference to the sense of camaraderie that developed over the course of the semester in his all-boys class, the female teacher talked about "clashing personalities" and once again, "catty" behavior. The teachers were also aware of the differing behaviors exhibited in the single-sex classes. The female teacher commented, "I don't know, every time I walk in there they say, ‘¿Cómo está?'. Even outside of class his single-sex students will always say, 'Hola, ¿cómo está? ¡Hola señorita!’ I don’t know what, they're just more motivated."

## Sex of the teacher.

In support of the earlier work by Clark and Trafford (1996) indicating students do not perceive the sex of their teacher as an important factor influencing their attitudes toward foreign language instruction, the general consensus amongst all students and teachers was that the sex of the teacher was irrelevant to both student academic success and motivation in the foreign
language classroom. That being said, the previously mentioned behavioral problems in the allgirls class were routinely attributed by the students to having a female teacher. Seven of the 16 students interviewed ( 3 boys and 4 girls) shared the perception that female teachers are "soft," that they are less authoritative than male teachers, and are often "overpowered" by their male students. To demonstrate this point a male student in the all-boys class commented:

My teacher, he's pretty stern. He's not gonna take any crap, you know. He's gonna write you up. He's not gonna play. But I believe females are more like, "Oh here's a warning. Here's this and here's that." and not go as far as giving you a referral.

A similar sentiment was voiced by a female student in the all-girls class: "I would prefer to have a male teacher, because they, because of like their authority and because they can control a classroom better."

Further related to behavioral problems associated with the sex of the teacher, another interesting issue was raised with respect to female teachers teaching large groups of female students. Reminiscent of a previously reported comment made by a female student pertaining to having too many females in one room, another female, in the all-girls class, felt that having a female teacher teach large groups of girls led to problems. She stated, "Females kick off more attitude. So having a female teacher, it's like her attitude clashed with the other females and it didn't go so well." A bold statement made by their Spanish teacher seems to support this notion. The young, female teacher commented that she herself has struggled and still does struggle when dealing with large groups of girls:

Even when I was in high school I didn't get along with girls....I didn't and I still don't. Old habits die hard. They become overcritical. They compare themselves to others. I'd be like putting something on the board and they'd be like, "Do you see what she's wearing?" .... I don't like interacting with any of them.

Not all comments pertaining to the female teacher were negative or related to behavioral matters. Two female students perceived having a female teacher as an advantage to girls. Both students felt that they could relate better to a female teacher, that girls could be more open in their discussions with a female teacher, and that female teachers tend to be more caring and sensitive to their needs. To demonstrate this point one such female remarked, "I was like able to relate on the fact that we were both females, and she would always be there to ask me questions like, 'Are you okay?' It seemed like she cared more."

Two boys made similar statements about their male teacher. Being a male, the boys felt their teacher could relate to their interests and was better able to incorporate these interests into lessons. The boys appreciated that their male teacher was the school's soccer coach and incorporated such topics as sports, music, and cartoons into his lessons. One male student who aspired to be a professional baseball player or athletic trainer specifically stated that he hoped to have the same male teacher throughout high school for this very reason.

The male teacher agreed that he could relate to his male students' interests and felt that he knew what to expect from them. He strongly believed that these insights helped him to foster a
positive rapport with his male students. While describing an incident in which a condom was found in his all-boys class, the male teacher emphasized that the rapport he had developed with his male students along with a good sense of humor were critical in diffusing the situation.

## Discussion

This study's results represent an interesting departure from the growing list of research demonstrating adolescent males to be less motivated second and foreign language learners than their female peers. Contrary to the previously reported findings of Carr and Pauwels (2006), Heining-Boynton and Haitema (2007), Kissau (2006), Netten et al. (1999), and Pavy (2006), the boys in this study enrolled in Level 1 Spanish were not found to be significantly less motivated than their female counterparts. This quantitative finding was bolstered by numerous positive comments made by boys during the interviews with respect to the study of Spanish. While the total motivation of the boys to learn Spanish decreased over the course of the semester, so did that of the females. Both students and teachers (males and females) acknowledged that students often choose to study Spanish due to the perception that the language is easier to learn than the other languages commonly offered in high school, such as French and German. It became clear that interest in the learning Spanish began to wane as the level of difficulty rose throughout the semester and as students eagerly anticipated summer vacation.

This decrease in student motivation over the course of the semester supports the previously mentioned concerns raised by Peirce (1995) and Norton (2000) with respect to Gardner's model of second language motivation. Both Peirce (1995) and Norton (2000) felt that Gardner's model portrayed motivation to learn another language as a fixed trait and disagreed with how he categorized second and foreign language learners as motivated or unmotivated and integratively or instrumentally oriented without taking into consideration that people are multidimensional and capable of change. The level of motivation of the students in this study did change over the course of the semester due to a variety of reasons.

While the quantitative data analysis uncovered few statistically significant findings, data gathered during the interviews provided great insight not only into differences between students taught in coeducational and single-sex classes, but also into differences between girls and boys in single-sex settings. In support of the previously mentioned work by Barton $(1998,2001)$ and Carr and Pauwels (2006), the boys and girls in the study reported during interviews that there are two distinct motivational advantages to single-sex instruction. In the absence of the opposite sex, students were thought to be less anxious in Spanish class and as a result more willing to participate. Furthermore, surrounded by only their peers of the same sex, students in single-sex classrooms were exposed to fewer distractions and were therefore more able to focus on their work.

While these advantages applied to both girls and boys in single-sex classes, it became apparent as the study progressed that the motivational benefits of the single-sex arrangement were perceived by both students and teachers to be greater for the boys than for the girls. Although the boys were initially very resistant to the idea of being in a class with only males, and in fact it was reported that several went to the school's office to request a change of
classroom, only four months later three of the four boys interviewed from the all-boys class reported that they would prefer single-sex Spanish classes in the future. More in depth analysis of the previously mentioned drop in students' total motivation to learn Spanish over the course of the semester further suggests the motivational advantage enjoyed by males in single-sex language classes. While the total motivation of both boys and girls to learn Spanish dropped significantly from the beginning to the end of the semester, the overall mean scores showed that the girls' total motivation score dropped more dramatically. In essence, while the girls had higher motivation scores than boys at both the beginning and the end, the data showed that the boys scores only dropped by .2 points. In comparison, the girls’ scores dropped by .5 points.

Both quantitative and qualitative results suggested that something specific to the classroom learning environment in the all-girls class was contributing to the wane in motivation amongst its female students. The girls in the all-female class had significantly lower scores with respect to their attitudes toward the learning situation than did their counterparts in the all-boys class. Moreover, the comparison between girls in the all-girls class and girls in the co-ed class showed that the attitudes toward the learning situation of the girls in the all-girls class dropped significantly over the course of the semester. The attitude toward the learning situation of the girls in the co-ed class, on the other hand, did not experience a statistically significant drop in the same measure.

The qualitative data also revealed less positive attitudes toward the learning situation on the part of the females in the all-girls class. While the interview data helped to complement the quantitative results in this respect, they also served to pinpoint specific aspects of the all-girls class that were contributing to these less positive attitudes. Although the females in the all-girls class were initially very excited at the prospect of being in a class without any males, their attitudes changed dramatically over the course of the semester, as did their behavior. Complaining of highly critical female classmates, incessant talking, and a female teacher who is ineffective at handling discipline issues, not a single female student interviewed from the all-girls class reported that she would prefer to be in an all-girls Spanish class in the future. Interestingly, the female teacher reported that she too would prefer to teach co-ed classes in the future.

The males in the all-boys class, on the other hand, had a much different experience. In sharp contrast to the findings of previous research (Chambers, 2005; Court, 2001; Younger \& Warrington, 2002), behavioral problems did not arise in the all-boys class. In fact, the boys in the single-sex class were reported to have formed a more cohesive, supportive, and more motivated group than their female counterparts. Contrary to previous reports of unmotivated and apathetic male second and foreign language learners in related research (Jones \& Jones, 2001; Kissau, 2006), the boys in the single-sex class were said to work diligently at their seat and to speak Spanish outside of the classroom.

The sharply contrasting picture portrayed in the study of a supportive and cohesive group of motivated male students and a critical and judgmental group of unmotivated female students again points to limitations in Gardner's model of second language motivation. As previously mentioned, Dörnyei and Murphey (2003) criticized Gardner for not considering the influence of group dynamics. Earlier comments from a female student who was afraid to speak in Spanish for fear of ridicule from her female classmates, as well as comments from a male student who reported that his male classmates had formed a "close knit" group that worked together and
supported each other in their Spanish classroom serve to underscore the motivational influence of group camaraderie in second and foreign language classrooms.

## Limitations

There are limitations to this study that should be noted. The present study examined boys taught by a male teacher, girls taught by a female teacher, and co-ed classes taught by a male teacher. Due to the limited number of Spanish classes offered, the researchers did not have access to a coeducational classroom that was taught by a female teacher. Because this condition did not exist, interactions that may have been present could not be examined. As stated earlier, a repeated measures ANOVA was used to examine possible factors that had an impact on students' motivation during two points in time. While the sample $(n=57)$ in this study was respectable, a larger sample could have strengthened the results of the student gender (2) X teacher gender (2) X classroom type (3) comparisons.

## Implications and Applications

Despite the above-mentioned limitations, the data from the study reveal very interesting findings from a mixed design (quantitative and qualitative) that have direct implications to second and foreign language classrooms. As concern over the lack of male participation in second and foreign language programs grows both internationally and in the United States and Canada, the implementation of single-sex instruction in such programs represents a possible strategy to increase the motivation of adolescent males to learn another language. Furthermore, as demonstrated in the study, the benefits of single-sex instruction are not exclusive to boys. Both male and female students alike, along with their teachers, would benefit from second and foreign language classrooms in which students are more focused and less anxious to communicate in the target language.

That being said, single-sex instruction was not found to be a panacea. Benefits enjoyed by one sex, of course, cannot come at the expense of the other. Possible behavioral problems, such as those reported in the all-girls class, would need to be addressed in order for the arrangement to be truly effective for all students. Providing training in classroom management strategies to second and foreign language teachers prior to implementing single-sex instruction may be one way of avoiding such problems.

It must also be acknowledged that single-sex instruction may not be a realistic solution in many situations. In advanced level second and foreign language classes and in classes of less commonly taught languages, student enrollment may not be large enough to support single-sex instruction. In fact, at the participating school in the study, single-sex French classes had been offered in the preceding semester. However, the French enrollment was too small the following semester to continue with the arrangement. In such circumstances, organizing same-sex groups within co-ed classes in which students can complete assignments and practice language concepts and skills may be a way of simulating single-sex instruction and thus allowing students to enjoy the benefits reported in the study.

Despite such limitations, it is the opinion of the researchers that the implications of the study extend beyond single-sex classes. While single-sex second and foreign language classrooms may not be overly prevalent, advanced level language classes that are largely populated by females are the norm. The teachers who participated in the interviews all mentioned that their advanced level Spanish classes often have only one or two male students and more than a dozen females. The findings of this study pertaining to all-female classes may therefore have even greater reach. Female teachers of second and foreign language classes that contain a high percentage of female students may, for example, also benefit from training in classroom management strategies to help them deal with the large number of females in their classes.

## Conclusion

This study exploring the impact of single-sex instruction on student motivation to study Spanish is the first of its kind, of which we are aware, to be conducted in either the United States or Canada and thus offers a significant contribution to the existing body of knowledge in the field. Although the quantitative data gathered from the student questionnaires uncovered only a few statistically significant motivational differences between students taught in single-sex and co-ed Spanish classes, rich qualitative data helped to reinforce these findings and to identify specific elements of the all-female class that were contributing to the significant differences reported. A list of possible contributions made by this study would have to include the benefits of using mixed methodologies. Future researchers are encouraged to combine research methods to not only uncover statistically significant or insignificant differences but also to explain the findings with participants' words.

The results of the study indicate that male and female students taught in single-sex classes are perceived to be less anxious to communicate in Spanish and more focused on their studies. While these findings are similar to those reported in the previously mentioned international studies, the results related to student behavior and sex of the teacher set the study apart from related research. Far from the poor male behavior reported in previous studies, the boys in the single-sex class were reported to have formed a cohesive and supportive group whose behavior was described as exemplary. On the other hand, the female students in the single-sex class did not fare as well. Clashing female personalities and the perception that female teachers are not effective disciplinarians were mentioned by both students and teachers when attempting to explain the loud and hypercritical atmosphere of the all-girls class.

As the study progressed it became increasingly clear to the researchers that motivation to learn another language is a complex and multi-faceted construct that extends beyond Gardner's model and is influenced by far more than the sex of the teacher, behavior management or classroom organization. Student and teacher comments during interviews suggested engagement in language learning is affected by a host of additional factors including anxiety, group dynamics, prior experience, student perceptions of specific languages and expectations of male and female-appropriate behavior. In this respect, single-sex instruction represents only one of many possible ways of influencing student motivation to learn another language. The research project described in this article offers a snapshot of one specific context and therefore precludes definitive conclusions. Nevertheless, this unique study has yielded some very interesting and rich
data suggesting possible benefits of single-sex second and foreign language instruction. It is the hope of the researchers that future studies will examine and build upon the data in order to further our understanding of the topic.

## Appendix A

## List of Measures

Motivational Intensity

1. When I am studying in Spanish, I ignore distractions and stay on task.
2. I don't bother trying to understand the complex aspects of Spanish.
3. I really work hard to learn Spanish.
4. I tend to approach my Spanish homework in a random and unplanned manner.
5. I don't pay too much attention to the feedback I get in Spanish class.
6. When I have a problem understanding something we are learning in my Spanish class, I always ask the teacher for help.
7. I tend to give up when a Spanish lesson gets off track.
8. I don't bother checking my corrected assignments in Spanish class.
9. I make a point of trying to understand all the Spanish I see and hear.
10. I keep up to date with Spanish by working on it almost every day.

Desire

1. I wish I had begun studying Spanish at an early age.
2. Knowing Spanish isn't really an important goal in my life.
3. I wish I were fluent in Spanish.
4. I want to learn Spanish so well that it becomes second nature to me.
5. As I get older, I find I'm losing any desire I had in knowing Spanish.
6. I don't care to learn more than the basics of Spanish.
7. I would like to learn as much Spanish as possible.
8. I sometimes daydream about dropping Spanish.
9. If it were up to me, I would spend all my time learning Spanish.
10. To be honest, I really have little desire to learn Spanish.

## Attitudes toward Spanish

1. Learning Spanish is really great.
2. I really enjoy learning Spanish.
3. I hate Spanish.
4. I would rather spend my time on subjects other than Spanish.
5. I plan to learn as much Spanish as possible.
6. Learning Spanish is a waste of time.
7. I love learning Spanish.
8. Spanish is an important part of the school program.
9. I think that learning Spanish is dull.
10. When I leave school, I shall give up the study of Spanish entirely because I am not interested in it.

## Integrative Orientation

1. Studying Spanish is important to me because it will allow me to be more at ease with people who speak Spanish.
2. Studying Spanish is important to me because it will allow me to meet and speak with diverse people.
3. Studying Spanish is important to me because I will be able to participate more freely in the activities of other cultural groups.
4. Studying Spanish is important to me because it will enable me to understand and better appreciate Spanish art and literature.

## Instrumental Orientation

1. Studying Spanish is important to me only because I'll need it for my future career.
2. Studying Spanish is important to me because it will make me a more knowledgeable person.
3. Spanish is important because people will respect me more if I have a knowledge of a foreign language.
4. Studying Spanish is important to me because it will someday be useful in getting a good job.

Teacher Evaluation

1. My Spanish teacher is friendly.
2. My Spanish teacher is sincere.
3. I think my Spanish teacher is polite.
4. My Spanish teacher is good at his/her job.
5. My Spanish teacher is a pleasant person.
6. My Spanish teacher is considerate of student feelings.
7. My Spanish teacher is dependable.
8. I think my Spanish teacher is reliable.
9. My Spanish teacher runs the classroom very efficiently.
10. My Spanish teacher is cheerful.

## Course Evaluation

1. My Spanish class is good.
2. I enjoy my Spanish class.
3. My Spanish class is awful.
4. I find my Spanish class to be unpleasant.
5. My Spanish class is of little value to me.
6. My Spanish class is really rewarding.
7. I find my Spanish class to be satisfying.
8. My Spanish class is not appealing to me.
9. My Spanish class is painful.
10. My Spanish class is agreeable to me.

Teacher Competence

1. My Spanish teacher is a well-organized person.
2. My Spanish teacher is a capable teacher.
3. My Spanish teacher is intelligent.
4. I feel that my Spanish teacher is a competent teacher.
5. My Spanish teacher is very industrious (hard-working).

## References

Barton, A. (1998). Unlikely linguists? Raising achievement in modern languages in all-boy teaching groups. The Linguist, 37(3), pp. 80-83.
Barton, A. (2002). Teaching foreign modern foreign languages to single-sex classes. Language Learning Journal, 25, pp. 8-14.
Cameron, D. (2004). Language, gender, and communication. Paper presented at the International Symposium on Language, Diversity, and Education for the Centre for Intercultural Language Studies (CILS), University of British Columbia.
Carr, J. (2002). Why boys into languages won't go: The problematic agenda in language education. Babel 37(2), pp. 1-5.
Carr, J., \& Pauwels. A. (2006). Boys and foreign language learning: Real boys don't do languages. New York: Palgrave MacMillan.
Chambers, G. (2005). Teaching modern foreign languages in single-sex classes in a coeducational context - review of a project in a North Yorkshire comprehensive school. Language Learning Journal, 32, pp.45-54.
Chavez, M. (2000). Teacher and student gender and peer group composition in German foreign language classroom discourse: An exploratory study. Journal of Pragmatics, 32, pp. 1019-1058.

Cheng, Y., Payne, J., \& Witherspoon, S. (1995). Science and Mathematics in full-time education after 16. Youth Cohort Report No. 36. London: Department for Education and Employment.
Clark, A., \& Trafford, J. (1996). Boys into modern languages: An investigation of the discrepancy in attitudes and performance between boys and girls in modern languages. Gender and Education, 7, pp. 315-325.
Court, K. (2001). Why are boys opting out? A study of situated masculinities and foreign language learning. Retrieved from http://www.ling.lancs/ac/uk/groups/crile/crile57/ court.pdf
Crookes, G., \& Schmidt, R.W. (1991). Motivation: reopening the research agenda. Language Learning, 41, pp. 469-512.
Diffey, N. Morton, L., Wolfe, A., \& Tuson. J. (2001). Language learner motivation: comparing French class attitudes of Scottish and Canadian secondary pupils. Scottish Educational Review, 33(2), pp.169-182.
Dörnyei, Z., Clément. R. (2001). Motivational characteristics of learning different target languages: Results of a national survey. In Z. Dörnyei and R. Schmidt (Eds.), Motivation and second language acquisition (pp.399-432). Honululu: University of Hawaii.
Dörnyei, Z., \& Murphey, T. (2003). Group dynamics in the language classroom. Cambridge: Cambridge University Press.
Draper, J., \& Hicks, J. (2000). Foreign language enrollment in public secondary schools, Fall 2000. Retrieved from http://www.actfl.org/files/public/Enroll2000.pdf

Elementary Teachers' Federation of Ontario. (2006). Member information survey, 2005-2006. Toronto, ON: Elementary Teachers' Federation of Ontario.
Gardner, R. (1985). Social psychology and second language learning: the role of attitudes and motivation. London: Edward Arnold Ltd.
Gardner, R., Clément, R., Smythe, P., \& Smythe, C. (1979). Attitude Motivation Test Battery Revised. London, ON: University of Western Ontario.
Gold, D., \& Reis, M. (1978). Do male teachers in the early school years make a difference? A review of the literature. (ERIC Document Reproduction Service No. ED 171 387).
Heining-Boynton, A.L., \& Haitema, T. (2007). A ten-year chronicle of student attitudes toward foreign language in the elementary school. Modern Language Journal, 9, pp. 149-168.
Jones, B., \& G.Jones. (2001). Boys'performance in modern foreign languages: listening to learners. London: Centre for Information on Language and Teaching and Research.
Kissau, S. (2006). Gender differences in motivation to learn French. Canadian Modern Language Review, 62, pp. 401-422.
Kissau, S. (2007). Is what's good for the goose good for the gander? The case of male and female encouragement to study French. Foreign Language Annals, 40, pp. 365-378.
Kissau, S., \& Quach, L. (2006). Control in the second language classroom: An analysis of gender differences. Journal of Applied Linguistics, 3, pp. 49-67.
Kissau, S., \& Turnbull, M. (2008). Boys and French as a second language: A research agenda for greater understanding. Canadian Journal of Applied Linguistics, 11, pp. 151-170.

MacIntyre, P., Baker, S., Clément, R., \& Donovan, L. (2002). Sex and age effects on willingness to communicate, anxiety, perceived competence, and L2 motivation among junior high school French immersion students. Language Learning, 53, pp. 137-165.
MacIntyre, P., \& Gardner, R. (1991). Methods and results in the study of anxiety and language learning: A review of the literature. Language Learning, 41, pp. 85-117.
Mireylees, J., \& Thomas, A. (1998, October). French and the single-sex classroom. Times Educational Supplement, pp. 18-19.
National Association for Single Sex Public Education. (2008). Single-sex education. Retrieved from http://www.singlesexschools.org/home.php
Netten, J., Riggs, C., \& Hewlett, S. (1999). Choosing French in the senior high school: Grade 9 student attitudes to the study of French in the Western Avalon School District. St. John's, Newfoundland: Memorial University, Faculty of Education.
Norton, B. (2000). Identity and language learning. Essex, England: Pearson Education Limited.
Oxford, R., \& Shearin, J. (1994). Language learning motivation: expanding the theoretical framework. Modern Language Journal, 78, pp. 12-28.
Pavy, S. (2006). Boys learning languages - the myth busted. Babel, 41(1), pp. 2-9.
Peirce, N. (1995). Social identity, and language learning. TESOL Quarterly, 29(1), pp. 9-31.
Peregoy, S., \& Boyle, O. (2008). Reading, writing, and learning in ESL: A resource book for K-12 teachers, 5th edition. Boston: Pearson Education, Inc.
Siegel, J. (2003). Social Context. In C. Doughty and M. Long (Eds.), Handbook of second language acquisition (pp.178-223). Oxford: Blackwell.
Sung, H., Padilla, A., \& Silva, D. (2006). Foreign language education, academic performance, and socioeconomic status: A study of California schools. Foreign Language Annals, 39, pp. 115-130.
US Department of Agriculture. (2009). National school lunch program. Retrieved from http:// www.fns.usda.gov/cnd/Lunch
US Department of Education. (2005). Single-sex versus coeducational schooling: A systematic review. Retrieved from http://www.ed.gov/rschstat/eval/other/single-sex/single-sex.pdf
US Department of Education. (2008). Guidelines regarding single sex classes and schools. Retrieved from http://www.ed.gov/about/offices/list/ocr/t9-guidelines-ss.html
US Department of Education. (2009). Early implementation of public single-sex schools: Perceptions and characteristics. Retrieved from http://www.ed.gov/rschstat/ eval/other/single-sex/characteristic/index.html
Williams, M., Burden, R., \& Lanvers, U. (2002). 'French is the language of love and stuff': student perceptions of issues related to motivation in learning a foreign language. British Educational Research Journal, 28, pp. 503-528.
Younger, M., \& Warrington, M. (2002). Single-sex classes in co-educational comprehensive schools in England: an evaluation based upon students' performance and classroom interactions. British Educational Research Journal, 28, pp. 353-374.


[^0]:    ${ }^{1}$ Many of the studies mentioned in this article have been previously described in related research by Kissau (see Kissau, 2007; Kissau, 2006; Kissau \& Quach, 2006; and Kissau \& Turnbull, 2008).
    ${ }^{2}$ French is not considered a foreign language in Canada. It is one of Canada's two official languages, and thus is considered a second language.

