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Single - sex Education in Northern Canada: A Case Study of Trapline Elementary School

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Abstract

In this article I present findings from a 2012 case study of a northern Canadian public school organizing its classes in a single - sex configuration. Trapline School 1 , a Kindergarten to Grade 7 (K - 7) school in the, Yukon Territory, Canada, began organizing classes employing a single - sex configuration in 2007. The purpose of this research was to gain insights into the current status of single - gender education at Trapline School based on the perspectives of a range of stakeholders. This study specifically identifies and presents the perspectives of teachers, students, former students, School Council (comprised of parents), and school administration. Emerging from the analysis are a number of findings, including the perceived benefits and strengths of a single - sex approach to schooling and areas requiring further consideration or improvement. The study identifies the need for greater clarity regarding what is expected to be accomplished by the implementation of single - sex classes.

Keywords

Single - sex Schooling, Elementary Schools, Case Study Research, Yukon Territory, Northern Canada

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Single-sex Education in Northern Canada: A Case Study of Trapline Elementary School

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In this article I present findings from a 2012 case study of a northern Canadian public school organizing its classes in a single-sex configuration. Trapline School¹, a Kindergarten to Grade 7 (K-7) school in the, Yukon Territory, Canada, began organizing classes employing a single-sex configuration in 2007. The purpose of this research was to gain insights into the current status of single-gender education at Trapline School based on the perspectives of a range of stakeholders. This study specifically identifies and presents the perspectives of teachers, students, former students, School Council (comprised of parents), and school administration. Emerging from the analysis are a number of findings, including the perceived benefits and strengths of a single-sex approach to schooling and areas requiring further consideration or improvement. The study identifies the need for greater clarity regarding what is expected to be accomplished by the implementation of single-sex classes. Keywords: Single-sex Schooling, Elementary Schools, Case Study Research, Yukon Territory, Northern Canada

Introduction

In this article I present findings from a 2012 case study of a northern Canadian public school organizing its classes in a single-sex configuration for over 5 years. Originally implemented in the school on the initiative of a former principal, the single-sex configuration at Trapline School had not been systematically reviewed with respect to its perceived effectiveness on the part of teachers and school staff, students, former students, School Council members/parents, and school administration. The purpose of this research was not to attempt to establish a relationship between single-sex education and academic achievement employing a quantitative approach. Had this been a goal of this research, it would be difficult to achieve given that a baseline of data was never established prior to the implementation of the initiative. Therefore, I sought to gain insights into what were considered to be positive and negative attributes of single-sex schooling from the perspective of a wide range of stakeholders at Trapline School after its implementation for a number of years, and contribute to the limited number of studies on single-sex schooling in Canada (Erling & O'Reilly, 2009).

Positioning the Researcher

I am an educational researcher who has lived in the Canadian North for over 16 years. During this time, I have been a teacher, vice-principal, and principal in both rural and urban Yukon schools. In 2010, I completed the PhD (Educational Studies) program at the University of British Columbia (Vancouver campus). Familiar with Yukon schools, I was asked to conduct a study research of the single-sex configuration at Trapline School for the Yukon Department of Education, the goal being to better understand the status of the initiative five years after its implementation .

¹ Trapline School, and all other names employed in this article are pseudonyms.

The Nature of Single-sex Research Studies

The nature of the research base with respect to single-gender education can be described as incomplete at best. Geographically speaking, Erling and O'Reilly (2009) identify that there are few Canadian studies that examine single-sex education, and thus generalizations made from studies from other countries must be done with caution. Studies of single-sex schools which focus on elementary and middle schools appears limited (Mael, Alonso, Gibson, Rogers, & Smith, 2005), and studies focus more on girls schools than boys schools in part due to the interest in feminism and girls' disadvantage and discrimination by schools (Gill, 2005; Thompson & Ungerleider, 2004;).

While some research studies support single-sex classes and academic achievement, much of the research may not be considered high quality given that many studies do not control for the myriad of variables affecting student achievement. On this point, Halpern (2009) offers:

The research literature on single-sex and mixed-sex classrooms consists of thousands of studies, and no single study can be considered definitive in answering the question of whether either of these educational programs is superior. Evaluators need to consider the research literature as a whole because many variables affect the outcomes of any single study (e.g., there might be particularly good teachers in one type of school or unequal resources between the types of classes in any single study, p. 11).

In support of Halpern's aforementioned recommendation that the research literature on single-sex education should be considered as a whole, this study offers a contribution from a geographic region where little educational research has been conducted. More globally, a potential benefit of this research is that it may serve to inform governments, school jurisdictions, site-based administrators, educators, and families that are considering educational decisions with respect to single-sex schooling. From a methodological perspective, this research reaffirms the strengths of case study research as "a research strategy which focuses on understanding the dynamics present within single settings" (Eisenhardt, 1989, p. 534).

In their meta-analysis of peer-reviewed single-sex studies, Canadian researchers Thompson and Ungerleider (2004) found that few research studies met the criteria of good research. By this these researchers identified that "Most studies used samples of convenience" (p.16), where researchers make comparisons between single-sex private or denominational schools with public or coeducational schools. Most studies do not control for the likelihood that parents, teachers, and administrators already may think about single-sex schooling in particular ways. Confident in their choice of schooling, this "thereby creates climates that reflect these beliefs" (Thompson & Ungerleider, 2003, p. 16).

In sum, given the multiplicity of variables affecting student achievement (including, though not limited to socio-economic status, parental income and educational attainment, level of resourcing, curriculum, training and experience of the teacher, prior achievement, attendance, motivation levels of parents and students, class and school size) and the difficulty for research studies to control for them, it remains problematic to conclusively establish a causal link between single-sex schooling and academic achievement.

Trapline Elementary School and Single-sex Education

Trapline Elementary School is a K-7 school in the, Yukon Territory, Canada. Single-sex classes were instituted at Trapline Elementary School in 2007, based on the initiative of a former principal. Enrolling between 100-200 students, it may not be considered a large elementary school by southern Canadian or urban standards. As indicated in the school's

statistics for 2010-2011, over half of the students are of First Nations ancestry. The school has undergone a number of structural changes as the population has grown (and subsequently shrunk) over its 50-year operational life. The student population could be defined as a transient one, where students and their families move in and out of the neighbourhood with regularity. In a given year, 80-90 students will either transfer in or out of the school.

The Research Question

The central question this study aimed to answer is: “What is the current status of the single-sex configuration at Trapline Elementary School?” By status, this study intended to explore what were considered as positive and negative attributes of single-sex schooling from the perspective of a wide range of stakeholders.

The research question was specifically framed in this manner, based on the absence of the construction of set of baseline data prior to the commencement of the single-sex configuration. Thus, in the absence of a range of data (including academic achievement, student attendance, or student/parent satisfaction surveys) with which to construct a comparative, coupled with the aforementioned difficulties with respect to establishing a causal relationship between single-sex schooling and academic achievement, this broader, exploratory research question was developed. The intention of creating an understanding of the current status of the initiative and perspectives on it by a number of constituent groups was therefore the goal.

My involvement in this project is based on the Yukon Department of Education’s increasing interest to understand schools and schooling through the conduct of locally-situated research. In my own case, I have been a school administrator (principal and vice-principal) in the Yukon Territory since 1996. My research interests include educational leadership, the principalship, cultural conceptions of leadership, rural and isolated school contexts, and the application of qualitative research approaches in the understanding of education in Canada’s northern regions.

These interests have grown out of my perception of a lack of local and contextually relevant educational research in the Yukon over the course of my educational career. Having completed the PhD (Educational Studies) program at the University of British Columbia (Vancouver) in 2010, I thus welcomed the opportunity to contribute to greater understandings of education in the Territory when asked to conduct this qualitative research project. This project fit well with my own qualitative research orientation, my personal and professional interests in Yukon education, and my theoretical orientation which accepts that realities are multiple, layered, and dynamic.

Research Approach

In this qualitative research study I employed a case study approach. This was based on Eisenstadt’s (1990) description of the case study approach in the following manner: “The case study is a research strategy which focuses on understanding the dynamics present within single settings.” This study was an instrumental case study employing one bounded case. This methodological choice was made given that case studies explore bounded systems (in this case an elementary school) and employed in-depth data collection (Creswell, 2007). Multiple sites could not be chosen to illustrate single-sex education more broadly in the Yukon as Trapline Elementary School is the only school in the jurisdiction to employ this configuration. Employing Yin’s (2003) categorization of case studies, this study was both explanatory and exploratory given that it explores an intervention (a single-sex configuration of a school) and is explanatory in that it attempts to answer a question (the status of the intervention).

To shed light on the research question, open, semi-structured interviews were conducted with a number of participant groups as a means of gaining a broad range of perspectives on the single-sex configuration at Trapline Elementary School. A strength of this approach is that it is flexible, allowing participants to frame their answers by sharing what is important to them. The open nature of the questions also permits further elaboration and exploration. I intended that the interviews were, as Lofland and Lofland (1984) describe: “a guided conversation whose goal is to elicit from the interviewee rich detailed materials that can be used in qualitative analysis” (p. 12). A purposeful sample was chosen from a number of groups not solely to compile and combine them, but to add richness to the data and counteract each other as a means of limiting issues of validity.

In the absence of a specific institutional policy to guide research in Yukon schools, I ensured that I followed the Government of Canada’s TCPS 2—2nd edition of the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (2010). This document is a joint policy statement by Canada’s three federal research agencies (the Canadian Institutes of Health Research (CIHR), the Natural Sciences and Engineering Research Council of Canada (NSERC), and the Social Sciences and Humanities Research Council of Canada (SSHRC). Its purpose is to guide researchers in the ethical conduct of research involving humans.

Meetings were arranged with the school’s administration prior to entering the research sites. The purpose of these meetings was: (a) to gain permission to access to the school; (b) to describe and seek input regarding the research intent and background of the conduct of the status review; (c) to share the interview questions with school administration and seek their input prior to their deployment; and (d) to solicit their assistance in the participation of students, parents, teachers, and support staff.

The TES School Council also played an important role in the data gathering phase: comprised of parents of children in the school, the Council sent information on the research initiative home to parents in the school newsletter and via the school’s website. The Council also held an evening information session at the school for parents. At this session, the Council introduced the researchers, explained the purpose and goals of the study, and were present to address any questions or concerns with respect to the initiative.

Participation in this research was voluntary and optional, and all participants were informed of the purpose of the research prior to agreeing to an interview. Two school sites were involved in the data collection: Trapline Elementary School (TES) and Klondike Secondary School (KSS), both located in the Yukon. At this point, a reader may ask why a second school site was visited when only one school employs a single-sex configuration. In response, this additional step was taken given that TES is a feeder school of KSS, and many of its students enter from TES upon completion of Grade 7.

Administration at KSS was provided with list of 41 former TES students identified as having moved on to KSS. Based on their in-depth knowledge of the students, school administration and counselling staff were asked to choose a representative sample of 12 students (six male, six female) in grades 8 and 9 and invite them to participate in an interview. Interviews were conducted with a school counsellor in attendance, and students were reminded that their participation was voluntary and that their anonymity would be maintained throughout. All students accepted the invitation to participate.

At TES, school staff and administration also selected the student-participants and invited them to an interview. 18 students from grades 4-7 were interviewed, in six groups (the composition determined by the school administration and staff) of three students.

Eleven teachers at TES were interviewed. Thirty minutes was provided for each interview, with additional time allotted if necessary. Participants were also invited and encouraged to share any additional thoughts or comments after the interview process was

completed. Finally, seven Educational Assistants and any other non-enrolling teachers (librarian, program implementation teacher, or counsellor) wishing to participate were interviewed to gain their insights and perspectives.

In order to provide opportunity for parental input, the TES School Council Chair organized a meeting to facilitate School Council members to provide their input. All four members were in attendance. To conclude the data gathering phase, a parent open-house evening was held at the school, where nine parents shared their thoughts and perspectives on the single-sex configuration at TES. In all, 63 participants contributed to the data gathering phase of this study.

Data Gathering and Analysis

The interview questions employed were both semi-structured and open-ended. The questions were developed first in consultation with the Yukon Department of Education's Director of Student Achievement, and then reviewed with the administration at each school for their advice and input. I took the approach that the administration of the school would know their students best, thus considering their insights was both important and valued. The intent of the questions was to be exploratory in nature, as a means of soliciting as broad a response as possible within the boundaries of the topic(s) under study. This also allowed for further probing and follow-up by the researcher in a manner that would not present as intrusive to participants.

Specific interview questions were developed for each participant group. This was particularly important in order to ensure that interview questions were age-appropriate and understandable (an important consideration for validity when interviewing elementary school-aged students). Student interviews were arranged by the school principals and lasted between 15 and 30 minutes in length. The following questions were employed in the interviews:

1. How many years have you been in a single-gender classroom?
2. What do you like about the single gender configuration?
3. What don't you like about the single gender configuration?
4. What advice would you give to teachers and the principal/vice-principal regarding single gender classes?
5. Is there anything else you'd like to share with respect to single gender classrooms?

Former students of Trapline Elementary School were also included in this study. This was done in order to gain their insights and reflections with respect to their perceptions of single-sex schooling having progressed to high school (which is grade 8-12 in the Yukon). Some of these students may have spent their entire elementary school experience at Trapline Elementary School, thus could contribute important reflections and insights based on their experiences. The same questions were used for this group, though framed in the past tense.

The questions posed to teachers, school administration, and School Council members were structured in a similar manner, though were focused to gain insights into academic and social-emotional aspects, community perceptions, and enrolment:

1. From your perspective what do you see as the a) academic advantages, and b) social-emotional advantages of the single gender configuration?
2. From your perspective what do you see are the disadvantages of the single gender configuration?

3. What does the community think about the single gender configuration from the perspective of a) academic advantages, and b) social-emotional advantages?
4. Have you lost or gained students with the single gender configuration?
5. Is there anything else you wish to share with respect to single gender classes at Trapline Elementary School?

Interviews for students and teachers were scheduled during the school day with the assistance of the school administration. Interviews with School Council members were conducted in an evening session. Responses were written down during each interview and first organized by participant group.

Once the interviews were completed, I was guided by LeCompte's (2000) steps of the qualitative data analysis process. These steps include:

1. Step 1: Tidying up
2. Step 2: Finding items
3. Step 3: Finding stable sets of items
4. Step 4: Creating patterns
5. Step 5: Assembling structures

With respect to the analysis of qualitative data, LeCompte (2000) offers the following perspective, which underpins the importance of employing a framework with which to organize and analyse data:

Because these kinds of data have no initial organizational structure by which to explain the events under study, researchers...must then create a structure and impose it on the data. The structure is created in stages, and forms the basis for assembling data into an explanation or solution. Creating the structure is analogous to the strategies used to assemble puzzle pieces; the pieces are like the units of analysis in the data. (pp. 146-147)

With this perspective in mind, I approached my own data, or "puzzle pieces" using LeCompte's framework as a guide. I arranged the data gathered according to participant-group and I employed each series of interview questions as an initial organizing framework in order to arrange responses and facilitate the management of the data. Typing my hand-written responses from the interview participants allowed me to reflect upon what I had heard, a data analysis approach supported by Glesne (1999) who suggests that: "Data analysis involves organizing what you have seen, heard, and read so that you can make sense of what you have learned" (p. 130).

As I worked through this data management and analysis phase, key topics or ideas were then constructed into key theme or topic areas based on the prevalence of response to the interview questions. As a result, specific, recurring themes or patterns emerged and were identified. Once the preliminary structures were assembled, I then shared them with the Yukon Department of Education's Director of Student Achievement for her review and insights. As the sole researcher, I felt that it was important to share initial my initial thoughts, reflections, and preliminary findings and invite further comment given that, as the sole researcher engaged with this project, multiple raters were not used.

Research Findings

As a result of the data gathering and analysis phases, the following findings are presented. Perceived benefits and strengths of the single-sex configuration are presented first, followed by identified areas requiring further consideration and/or improvement. In all, 18 students from grades 4-7 at Trapline Elementary School were interviewed, as were 12 grade 8 and 9 former students. An equal number of boys and girls were included. The principal and vice-principal, 11 teachers and 7 educational assistants at Trapline Elementary school shared their observations. Four Trapline Elementary School Council members and 9 parents also contributed in an evening parent session. In all, 63 participants contributed their thoughts which lead to the findings of the study.

Benefits and Strengths

Single-gender classes appear to have social-emotional benefits in the classroom for boys and girls

Participants in this study identified social-emotional classroom benefits as a result of the single-sex configuration. There appears to be an increased ability for students to share their concerns, issues, and challenges in a single-sex setting. In particular, students identified that they felt more comfortable raising their hand, talking, and sharing ideas in a single-sex classroom. As one grade 7 female student offered, "You can be yourself without the boys there. You can talk about girl-stuff without being insulted." School Council and parents also offered their observations that students appeared more willing to participate and volunteer in single-gender classes, particularly those students who may be shy by nature.

Teachers suggested that students engaged in more "risk-taking" behaviours as a result of a safer environment where they did not have to worry about looking "dumb." Further, boys who are having personal difficulties are more willing to speak about them. As one teacher described, boys do not need to put on the "invisible cloak" to mask their feelings when there are no girls around. Some parents observed that their children benefitted from heightened levels of confidence as a result of single-gender classes.

With respect to feeling safe from a social-emotional perspective, the highly influential role that perception (how they perceive that they will be thought about by the other sex) plays in boys' and girls' thinking emerged repeatedly. Boys and girls are both keenly aware of each other's presence (often described as "awkward" by participants) and repeatedly described the powerful and limiting effects of perception on their willingness to participate in learning. Some students suggested that, while mixed classes would be quieter, this was as a result of fear of speaking up.

Single-sex classes are perceived to have academic benefits for boys and girls

Both boys and girls described that they found the single-sex classroom less distracting without the other sex present, resulting in a greater ability to focus. Students appreciated that teachers could pick topics of specific interest to them, thereby tapping into their motivations more easily. As a result, learning was described as more fun by them. Boys identified specific activities: hockey, building solar cars, studying robotics using Lego, and reading non-fiction novels.

Teachers commented that they have an increased ability to "go deeper" when exploring and discussing topics. Students appear more willing to engage in "non-traditional" activities (e.g., dance for boys, bridge-building for girls). In particular, teachers identified the

benefits for girls in this regard. It appears that single-gender classes are supportive of girls' reading, writing, and self-expression. A teacher observed "Girls are similar- you can teach to their interests, and that may translate into more academic benefits." School Council members also shared their perception that there appear benefits for girls in science and math classes.

With respect to what is taught and the pedagogy employed in the classroom, participants identified an increased ability on the part of teachers to select materials of specific interest to boys and girls, and to deliver it in engaging ways. Teachers appear able to more sharply focus their resource and curricular choices to meet the need of boys or girls. In the words of one teacher, "You get to target your teaching more to the needs of the kids- for example, rather than use manipulatives in math, you can demonstrate to boys and have them model. There are academic benefits to this." This was a point also identified and appreciated by students.

Parents contributed that they recognized that boys and girls may learn differently, and thus the learning process could be tailored to accommodate those differences in a single-sex class. On this point, a teacher shared the following example from Drama class: while girls are learning to dance, the boys can be practicing how to appropriately use sword-play in a stage fight.

There appear to be fewer distractions in a single-sex classroom

Students clearly identified the ability to concentrate in the classroom as a particular strength of single-sex classes. In particular, girls suggested that they could concentrate better with less noise and without boys "bugging them" or "showing off." Boys also commented that girls were distracting in the classroom, and that it was more fun to be with their (male) friends. For parents, the ability to focus was perceived to be beneficial to learning. One parent shared the following observation with respect to her daughter's placement in a single-sex class: "I love it- my daughter is really happy with an all-girls class. She finds it less distracting without boys there."

To varying degrees, boys and girls like some aspects of single-gender classes but not everything about them all the time

Both boys and girls identified many positive attributes with regards to single-sex classes. Each group appreciated the field trips, activities, and choice of curricular resources customized to their particular interests and learning needs. Boys expressed the ability to get to know other boys better and have stronger connections and friendships while girls appreciated the ability to be themselves.

These positive points notwithstanding, a variety of responses were given by students regarding whether they would prefer single-sex, mixed gender, or a blending of the two. For some students, they would like to be in single-sex classes the following school year. For others, they would prefer to be in mixed classes, stating that it feels more "natural" for boys and girls to be together. Yet others would prefer a combination of the two. One former student (while appreciative of having had the single-gender experience) suggested single-gender in the earlier grades, and mixed-gender in late elementary would better prepare students for the high-school transition.

School Council and parent perceptions of single-gender classes appear positive

The Trapline Elementary School Council offered positive comments on the single-gender configuration at the school. From their perspective, the single-gender configuration

helps define TES from other schools, and is therefore part of the school's identity. The School Council expressed that, if single-sex classes made a difference for the students and the school, then it should be supported. Conversely, the School Council also recommended that if single-sex classes do not make a difference, it should no longer be continued. The School Council also expressed that the single-gender configuration needed to make sense to the broader school community.

While expressing that they could not speak categorically for all parents, based on their interactions with the broader parent community the School Council's perception was that parents seemed to like single-sex classes. This perception was supported by the comments shared in a subsequent parent meeting: participants appreciated different approaches to learning and commented on how their children found it easier to concentrate and be open. In general, parents perceived that the advantages of single-gender classes outweighed the disadvantages, and for some parents, single-sex classes are a deciding factor whether to attend. On this point one parent-evening participant reflected: "We didn't know single-sex schooling existed when we came to Whitehorse and the school, but when we did, we were excited. We would have come straight here had we known." The School Council also remarked that there appears a greater interest in single-sex schooling from parents of boys, than from parents of girls.

While many positive perceptions were shared, participants also identified concerns with the single-sex configuration at TES. These are presented in the following subsection.

Concerns with Single-sex Configurations

There appear fewer opportunities for boys and girls to interact with one another in a structured environment

Teachers, students, and former students expressed concern that there were insufficient opportunities for boys and girls to come together and interact in a structured manner. The effects of the separation can have lasting effects, as one teacher observed: "When kids do come back together in mixed-sex classes it is a real problem. In extreme situations it can take a whole year to sort out." Staff members voiced concern and have reservations that there were social disadvantages to children as a result of boys and girls being in separate classes. Teachers and support staff identified that unstructured time on the playground at recess breaks is insufficient opportunity for boys and girls to learn how to interact positively with each other.

School Council members also commented on differences in behaviour between class and the playground. As a result, healthy boy/girl relations may not be as readily fostered as they could be, and thus there can be behavioral issues when boys and girls do come together. Parents voiced the concern that the academic benefits of single-gender classes appear offset by deterring positive socialization between boys and girls. This was reflected by a parent-evening participant who recommended: "There needs to be a balanced academic and social sense of community." From a parental perspective, this could generate rivalry and competition, perhaps resulting in a diminished social sense of community.

Some boys and girls expressed that they missed each other as a result of being separated. Boys and girls identified that, particularly at a younger age, they had good friends who were of the opposite sex, but then drifted away from each other once separated. Girls described wanting to know the perspectives of boys. Others had friends who were boys, but once they saw each other less often they found that behaviours became less friendly. When asked for her thoughts on the disadvantages of single-sex classes, a grade 4 girl shared the following reflection: "Sometimes you might have a friend who is a boy- I can't spend time

with him because he's now in a different class, in a different part of the school. Now I don't see him, he's starting to be rude."

Former TES male students also offered that, at times, they had missed being with the girls. With respect to the need for interaction, former TES students now attending KSS described that it was difficult and confusing for them to transition to high school and enter mixed-gender classes with students they did not know.

Unintended behavioural consequences

Teachers, students, and parents shared examples where single-gender classes could have their own distinct behavioural attributes- not all of them entirely positive. Female staff members expressed that there can be an amplification of emotions and increased levels of what they described as "drama" when over 20 adolescent girls spend almost all their time together. This results in higher stress levels, exhaustion, and a distraction from instruction. This concern was also noted at primary levels, where more classroom meetings are needed to address girls' looks at one another and the tone of voice used when talking with peers. Teachers identified that disputes can last for a number of days. One parent offered that "girl on girl" behaviours can be particularly confrontational.

Boys also shared behavioral observations of their classes. Former TES students suggested that having a number of boys together continuously can foster what one participant described as a "mob mentality" and a "gong-show" for the teacher. From their perspective, there can be more bullying and boys being mean to one another in a single-sex class. From the perspective of teachers, these factors can make it more difficult to maintain a positive learning environment.

A lack of data makes assessment difficult

As stated at the beginning of this report, a purpose is not to establish a causal link between single-gender classes and student achievement as measured by test scores. This point notwithstanding, teachers identified an absence of data or evidence with respect to single-gender classes. One teacher offered that engaging in this study was the first systematic effort towards gathering data or evidence that she was aware of, stating: "We should be showing some real results: there is more that we could be doing but we have a lack of deliberate data." As a result, teachers shared that there can be defensiveness when engaging in conversations about single-sex classes. As a consequence, it appears challenging to promote focused conversations on single-sex education that are founded on a clear evidence-base.

School Council members expressed that it was difficult for them to state with confidence whether there are academic gains or advantages, in the absence of a clear baseline from which to compare data collected over the last 5 years. One School Council member shared the following sense of ambiguity surrounding single-sex classes: "In the absence of data, there is a bit of a feeling that we are winging it from year to year. With the broad range of needs that we have, I just want our kids to be taught well." While supportive of single-gender classes, this makes it more difficult for School Council members to understand whether there are academic advantages that could be attributed to single-gender classes, as reflected by another School Council member: "If it makes a difference for our students and who we are as a school, then we should go for it. If it doesn't make a difference, don't do it." As a result, there appears a sense of uncertainty, coupled with a desire to learn more regarding any academic effects. This concern was also shared in the parent open-house evening.

Single-sex classes require a good teacher “fit”

Study participants discussed the importance of “fit” with respect to teaching in a single-gender classroom. While students may not specifically use this term, in this study “fit” was taken to mean the importance of having a teacher who understood their students, who taught in engaging ways, and selected exciting materials and activities tailored to their interests. The school administration clearly described the deleterious effects of not having the right “fit,” in the right place, at the start of the school year when students are bonding and establishing relationships with their teachers: “A number of things have made it difficult to find the people who had the right kind of attitude and “fit”...we have the people on staff currently who are committed to single-sex classes and if we need to hire, we’ll have enough time to find someone with the right “fit” (School administration) Teachers also discussed the importance of being attuned to how their students learn, and for the need for training specific to how to teach single-sex classes.

Organizational challenges

The structure and organization of the school needs to be taken into account when single-gender classes are instituted. Teachers expressed that creativity and flexibility needs to be employed when organizing the school. As one teacher remarked, depending on student enrollment and gender-composition, single-gender classes can limit or eliminate the ability to have split-grades (two grades combined in the same classroom) in a small school: “We know there are some kids who can’t be together, yet have to be in a single-sex configuration.” As a result, it may become more difficult to group students by ability, or to separate students who would best be placed in separate classrooms.

Limitations of the Study

As stated previously, when single-sex classes were instituted at Trapline Elementary School in 2007, data (attendance rates, academic achievement scores, satisfaction surveys) was not systematically collected and compiled to form a baseline prior to the initiative commencing. Thus, a limitation of this study is its inability to identify causal relationships based on a comparative analysis of data. Specifically, this study does not identify that single-sex classes alone result in increased academic performance, as measured by test scores, or improved student attendance rates. With respect to the limitations of case study research, as with such studies, the findings from this research are not readily generalizable to other contexts.

Discussion and Concluding Remarks

This study identifies the complex dynamics emerging as a result of deploying single-sex classrooms in an elementary public school in Canada’s Yukon Territory. Factors such as student behaviour, motivation to learn, teaching style and “fit,” the selection of curricular materials, socialization of students, and school organization and timetabling considerations were identified as a result of interviews conducted with a diverse participant group. Their contributions signal important aspects which require careful thought and consideration by schools and communities that are considering the implementation of a single-sex configuration. As the findings in this study reflect, reconfiguring schools into single-sex classes can create unintended and unanticipated consequences.

Admittedly, with most programs that are implemented there will likely be unforeseen consequences. In this study, the transition to high school was identified as a challenge compounded by single-sex education in the elementary years. In jurisdictions such as the Yukon, where no middle schools or junior-high schools exist, the transition from elementary school to high school can be made more difficult and confusing for students. Careful consideration should therefore be given with respect to in which grades single-sex education is deployed, should the choice be made to do so.

To implement single-sex classes and expect that students would be more motivated, behave better and be on task as a result would appear to be simplistic at best. Regardless of the configuration employed, the complex interpersonal and organizational dynamics of the school come into play nonetheless and must be carefully considered. The question thus arising at this point is: “How are these aspects different when organizing a mixed-sex school?” While this study identifies that such factors require specific consideration in a single-sex classroom, they would appear to be of no greater import than in their mixed-gender counterparts. One then wonders: Why would a school organize in a single-gender configuration in the first place?

The conduct of this study surfaces broader issues worthy of further exploration. Specifically, what constitutes student achievement, engagement, and success, and how can these factors be nurtured? The need for such conversations appears supported not by what participants did say, but what they did not state: that the deployment of single-sex classes at Trapline Elementary was achieving a particular goal, or a set of pre-determined goals intended to be achieved through the specific institution of single-gender classes.

While not the specific research question of this study, that the matter of goal achievement through single-sex education did not arise in the conduct of this research signals the need for further discussions regarding the purpose of single-sex education at Trapline Elementary School. In support of this, Thompson and Ungerleider (2004) offer: “A question that policy makers must consider is: What is our purpose for initiating public single-sex classes and schools? If in fact it is about improving achievement for students, then one must consider the sound research which suggests the single-sex environment does not have an effect on achievement” (p. 17). These are aspects that need to be grappled with through an ongoing dialogue between teachers, school administration, the Yukon Department of Education, parents, and students.

As stated earlier, this qualitative research employs an instrumental case study of one bounded case. With respect to the generalizability and transferability of the findings emerging from this research to other contexts, this must be done with caution. This is not to suggest that there are no aspects that may be applicable for consideration in other contexts: for example, it would be reasonable to assume that the stated methodology could be employed in other school contexts. Keeping in mind the distinct contexts of Yukon schools, generalizing the findings from this study to other contexts becomes problematic. In light of the aforementioned dearth of similar studies, perhaps the findings here are best suited for comparison to findings from future research conducted in other school contexts.

To conclude, while this article presents insights into single-sex education at Trapline Elementary School, at this point it remains unclear what the single-sex initiative was meant to accomplish through its institution. As a result, there remains ambiguity on the part of parents as to whether single-sex education is accomplishing what it might (or might not have) been intended to do five years ago. Therefore, until the matters of purpose and intention receive attention and are more clearly understood, the question of single-sex education and what it is meant to accomplish at Trapline Elementary School remains unanswered.

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