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SAGE Open 2013 3:
DOI: 10.1177/2158244013484731

SAGE Open
April-June 2013: 1–13

DOI: 10.1177/2158244013484731
sgo.sagepub.com
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Dual Campus High School: A Study to Determine the Impact of a Multicampus High School on Student Engagement, Student Success, and Faculty Efficacy

Carmen P. Mombourquette[1]

Abstract

September 2010 witnessed the opening of the first complete dual campus high school in Alberta. Catholic Central High School, which had been in existence since 1967 in one building, now offered courses to students on two campuses. The "dual campus" philosophy was adopted so as to ensure maximum program flexibility for students. The philosophy, however, was destined to affect student engagement and staff efficacy as the change in organizational structure, campus locations, and course availability was dramatic. Changing school organizational structure also had the potential of affecting student achievement. A mixed-methods study utilizing engagement surveys, efficacy scales, and interviews with students and teachers was used to ascertain the degree of impact. The results of the study showed that minimal impact occurred to levels of student engagement, minor negative impact to staff efficacy, and a slight increase to student achievement results.

Keywords

student engagement, teacher efficacy, school organization, school leadership

Background

In September of 2010, the first truly "dual campus" high school was opened in Alberta. The school was a remarkable example of what can be achieved when people from various stakeholder groups come together and plan for communal action. It also provides an example of innovation and growth within the proposed structural organization of a school. When Holy Spirit School Division officials and Catholic Central High School personnel began to explore what structure they wanted to see in the design of a new Catholic high school, they came to the realization that to maximize student programming, the idea of a "dual campus" high school should be investigated. They realized that the existing high school, even though it had run out of the space required to increase program options for its students, still offered program specialties that could not be duplicated in a new facility at the same time as introducing new areas of interest for students. The educators and school officials struck upon the idea of keeping the school as one even though the campuses would be located on opposite sides of the city. The original school was to become Campus East and, the new structure, Campus West.

Now that both campuses are open, it is important to see whether the organizational structure of the school will serve the needs of the students and the teachers. It is also important to see whether this is a model that could serve other communities who may be struggling with maximizing the programming options for their students. Finally, given the current interest in 21st-century learning, and the concept that learning takes place in many environments and should not be restricted, it would be interesting to determine whether students can embrace the idea of "one school, two buildings."

Theoretical Framework

During the design phase of this study, a rather exhaustive survey was completed where we looked for research dealing with what we would come to call a dual campus philosophy. Research into the area of schools existing on multiple sites and the impact that the resulting organizational structure had on students and staff was limited. The quest then for a literature review that would form the theoretical framework for this study had to take a different tack than just looking at what other researchers discovered about the impact of campus structure. Issues of student engagement, staff efficacy,

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and the connection between student engagement and academic achievement needed to be explored to set the stage for looking at the impact of the change in structure and makeup of the school. In other words, will the change in the structure of the school change the student perceptions of engagement, staff sense of efficacy, and what will be the overall impact on student academic achievement?

Fortunately, we had access to student and staff data for the 3 years prior to the opening of the second campus. From that data, we were able to make interpretations about the levels of engagement, staff efficacy, and student academic performance for pre- and postdual campus perspectives.

Student Engagement

The topic of student engagement has become a well-researched item. So much so, that Levin (2010) stated, "Engaging students in secondary school appears to be a concern in schools around the world" (p. 89). A 2005 report from the National Research Council (NRC) suggests that a focus on engagement calls attention to the connection between a student and the social context in which learning takes place, namely, the school. The NRC (2005) report stated,

> Successful high school reforms convey high expectations and promote a sense of competence in a student's ability to succeed, feelings of control over academic outcomes, beliefs in the value of education, and a sense of belonging and respect. Effective schools and effective teachers provide support and help students understand what it takes to learn and succeed in school. (p. 3)

Even John Dewey (1938), at the turn of the previous century, emphasized the important link that existed between student engagement and student learning.

While in Canada, under the direction of the Canadian Education Association (CEA), tremendous gains have been made in developing an understanding of the connection between student engagement and student success in school. The Willms, Friesen, and Milton (2009) report, commissioned by the CEA, defined student engagement as

> the extent to which students identify with and value schooling outcomes, have a sense of belonging at school, participate in academic and non-academic activities, strive to meet the formal requirements of schooling, and make a serious personal investment in learning. (p. 7)

Finn and Voelkl (1993) looked at 6,488 high school students across the United States and their engagement in school. Engagement in this study was defined in terms of participation and identification with the school. The researchers looked at the role of school structure, regulatory environment, and racial/ethnic composition of the students and staff. The most salient results were found in relation to school structure. It was found that students who went to a small school attended more regularly, were more likely to participate while at school, and identified their school as a warmer place. The study was conducted with students at risk for dropping out of high school and succumbing to delinquency. It showed that engagement was an important factor in keeping youth in school and suggested ways to increase student engagement.

Lee and Smith (1995) built on the understanding of the connection between student engagement and student learning by looking at the effects of school reform and school restructuring on student achievement and engagement. The Lee and Smith study examined two types of school organizations: bureaucratic and communal. Many of the restructuring efforts in American schools aimed at making a shift from bureaucratic (comprehensive) high schools to smaller communal schools. Although many schools claimed to be making efforts to reform their schools, only some schools actually had reform processes effectively in place. The results of the study found that students at schools with a variety of reform practices experienced achievement and learning gains. They also found that these achievement gains were more equally distributed among members of the school than in nonreform schools. The same findings were found in regard to student engagement. In schools that attempted reform processes but did not follow through with them or did not put in a valiant effort, the reform process could actually be harmful and lead to reduced engagement and achievement. Lee and Smith suggested that reform processes that support personal and sustained connection between students and adults appear to be what is important.

Yazzie-Mintz (2006) found that many factors contributed to student engagement, including relationship with adults in the building, feeling safe in the school, and interest in school activities and classes. Yazzie-Mintz concluded that students want to feel as though their voices are heard when they render opinions about what makes high school effective to them. The researcher reported that many students felt that their answers on questionnaires and surveys would not be taken seriously or effect change. The key message from this study was that when making school reforms, administrators should take into consideration student ideas about what needs to be changed and integrate them into the reform strategies. If students do not feel as though they have been heard, they are less likely to be engaged in the school community.

Not all schools engage students in similar ways. Willms et al. (2009) argued that schools differ substantially in what they do to promote student engagement. The differences in approach and the resulting changes in the levels of engagement affect student performance. Furthermore, they state, "that differences among schools have less to do with students' family backgrounds than they do with school policies and practices, particularly with the learning climate" (Willms et al., 2009, p. 31).

Teacher Efficacy

Teachers' belief in their ability to positively affect the growth and education of their students lies at the heart of the "efficacy" term. Bandura (1993) related the understanding of the term *self-efficacy* to students, individual teachers, and teachers collectively when he stated,

> There are three different levels at which perceived self-efficacy operates as an important contributor to academic development. Students' beliefs in their efficacy to regulate their own learning and to master academic activities determine their aspirations, level of motivation, and academic accomplishments. Teachers' beliefs in their personal efficacy to motivate and promote learning affect the types of learning environments they create and the level of academic progress their students achieve. Faculties' beliefs in their collective instructional efficacy contribute significantly to their schools' level of academic achievement. (p. 1)

Tschannen-Moran and Hoy (2001) reviewed the existing measures of teacher efficacy and sought to develop a new and more comprehensive measure. They explored the existing definitions and concluded that teacher efficacy is a contextual and subject-matter-specific measure of a teacher's judgment of his or her capacity to facilitate learning and engagement in students. Tschannen-Moran and Hoy developed the Ohio State Teacher Efficacy Scale (OSTES). They found that teachers' efficacy beliefs would transfer to the extent that they perceive similarity in the task resources and constraints from one teaching situation to another. Therefore, when the teaching task is changed, teacher efficacy should also be reassessed to determine any corresponding changes. Teacher efficacy has an impact on student engagement/motivation, student achievement, and student self-efficacy.

Goddard, Hoy, and Hoy (2000) explored the meaning of collective teacher efficacy. Goddard et al. reported that collective teacher efficacy is more than the sum of teacher individual efficacy. It is an emergent property based on the dynamics of the group. Therefore, they found collective teacher efficacy to be the extent to which the teachers in a school as a whole believe that they as a group are able to teach and engage students. High teacher efficacy leads to the acceptance of challenging goals, strong organizational effort, and a persistence that leads to better performance, including higher academic achievement.

That teachers make major differences in the educational lives of students is certainly not a new idea (Creemers, 1994; Creemers & Kyriakides, 2004; Hill & Flynn, 2006; Marzano, Pickering, & Pollock, 2001; Willms et al., 2009). What is starting to become apparent is that teachers' role may be even more important than students' family background (Willms et al., 2009). Individual teachers make a great deal of difference when it comes to affecting student achievement. Collective teacher work, where teachers throughout the building collaborate and share in the experience of improved practice will have an even greater impact on students (Garet, Porter, Desimone, Birman, & Suk Yoon, 2001; Penuel, Fishman, Yamaguchi, & Gallagher, 2007).

Connection Between Engagement and Student Academic Success

Student disengagement is a serious issue in schools throughout Canada. In a 2011 report from the CEA, Dunleavy and Willms (2011) reported that of 67,248 Grade 5 to 12 students surveyed, only 70% are socially engaged in school. They also report that roughly 70% get to their classes on time, or even make it to school at all. The numbers start to get a little starker when the issue of being engaged in learning is assessed. They refer to a serious emotional and cognitive investment in learning as intellectual engagement. Dunleavy and Willms then report 42% of Grade 10 students, 41% of Grade 11 students, and 45% of Grade 12 young men and women as being intellectually engaged. Klem and Connell (2004) indicated, "By high school, as many as 40% to 60% of all students—urban, suburban, and rural—are chronically disengaged from school" (p. 262).

Lonczak, Abbott, Hawkins, Kosterman, and Catalano (2002) pointed out that when students feel connected to the school, we see less use of narcotic substances, lower levels of social distress and violence, and fewer instances of teenage pregnancies, whereas Schapps (2003) reported the same is true for instances of skipping. When students feel connected to school, there is less likelihood that they will be truant. Similarly, Wentzel (1998) made the link between students succeeding academically, with the resulting higher graduation rates, when students are connected to school.

Research Objectives/Purpose

Now that the dual campus school is open, and students are receiving instruction in two buildings rather than one, it was important to see whether the organizational structure of the school serves the needs of the students in the way that the originators planned. It is also important to see whether this is a model that could serve other communities who may be dealing with their own issues surrounding programming options for their students. Finally, given the current interest in 21st-century learning, and the concept that learning takes place in many environments and should not be restricted, it becomes necessary to determine whether students can embrace the idea of "one school, two buildings."

Therefore, the purpose of this study is to determine whether a dual campus organizational structure had an impact on student engagement and teacher efficacy while

also ascertaining whether there is a correlation between these two variables and overall student academic achievement and performance. Specifically, the following research questions are addressed:

Research Question 1: What impact has the movement toward a dual campus school had on student engagement?
Research Question 2: What impact has the movement toward a dual campus school had on the teachers' sense of efficacy?
Research Question 3: What impact has the movement toward a dual campus school had on the courses students complete in their high school program?
Research Question 4: What impact has the movement toward a dual campus school had on student academic performance as determined by overall grade point average (GPA)?

Importance of Study

Catholic Central High School and Holy Spirit School Division tried an organizational structure that was nothing short of being radical. It had the potential to serve as a model for other schools and school divisions faced with similar issues. However, before it could serve as a model, its impact first needed to be studied. Looking at how programming has changed and whether students feel as, less, or more engaged; whether student academic performance has increased, stayed the same, or decreased; and whether teachers continue to feel that their work influences the lives of students, all in relationship to programming, provide the story other schools will need before they decide on such a radical change to meet their students' needs. This project demanded thinking "beyond the box." The challenges inherent in a dual campus ranged from transportation to communication—from how will students and staff be transported between campuses to how will students be kept connected to all that is offered at the school. A concept such as this demanded answers to questions that were not even considered in the initial development of the plan.

Method

The study was of the mixed-methods type and entailed quantitative and qualitative data gathering. Quantitative came from surveys already administered within the School Division—the Teacher Schollie Survey, the Student Schollie Survey, as well as the Accountability Survey of Students and Staff. It also came from two new surveys that were administered in 2011—the OSTES to determine the level of teacher efficacy and the Tell Them From Me Survey as a measure of student engagement. Diploma examination results along with data for school completion rates, graduation rates, and drop-out rates were also used. Results from the 3 years prior to the opening of Campus West were used as baseline data.

Qualitative data came from interviews with students and staff. They provided the personal piece that gave voice to the study. Interviews took place in January and February of 2011.

Participants

Student enrollment in the 2010-2011 school year, the 1st year of the dual campus philosophy implementation, was 856. There were 45 teachers on staff during this 1st year of implementation. Of the 856 students, 319 (all students were invited to complete the survey) took part in the Student Schollie Survey, whereas 38 teachers (all teachers were invited to complete the survey) completed the Teacher Schollie Survey. The Tell Them From Me Survey had 179 student participants. The Teacher Efficacy Scale was completed by 21 teachers. In total, 19 students and 14 teachers were interviewed.

Sampling Procedures

A member of the Holy Spirit School Division central office staff was responsible for inviting the students to participate in the Student Schollie Survey. All students were invited to participate in the survey. All teachers were given the Teacher Schollie Survey and asked to participate. Students participating in the Tell Them From Me Survey were selected randomly. All teachers were given a copy of the Teacher Efficacy Scale; 21 elected to complete it. Students who were interviewed were selected by School Administration to provide a diversity of opinion and background. Teachers who were interviewed were selected on a volunteer basis. All who wanted to be interviewed were invited to book a time with a researcher.

Quantitative Measures

The Teacher Schollie Survey and Student Schollie Survey (collectively referred to as the Schollie Surveys) presented the best opportunity for making comparative statements. Schollie Survey information was gathered from the 3 years prior to the dual campus philosophy coming into operation and therefore could be compared with the test year. With an assumption of independence of the group member scores (e.g., very few/no individuals completed more than one survey), we conducted one-way ANOVA/Kruskal–Wallis tests (depending on normality of distribution) to determine the significance of observed changes in engagement scores for students and staff over time.

For the student group, we performed multiple regression and principal components analysis/factor analysis. Multiple regression was proposed because it served to identify the relative importance of various independent variables in predicting school engagement. Regression analyses were run for each year of data and overall to identify those variables that consistently emerged as predictors of engagement.

Qualitative Measures

Qualitative data analysis techniques were used in the analysis of the information obtained from the individual student and teacher interviews. Analysis included the compilation and review of each interview using a thematic analysis technique. This involved a data review searching for and refining the number of themes, which appeared as common threads throughout the various focus groups.

The following is a pointed form of the analysis that was used for the qualitative data:

1. Taped interview sessions held with students and teachers.
2. Interviews transcribed verbatim.
3. First Content review conducted—Themes pulled and coded by the researcher and aligned with research questions.
4. Second Content review conducted—Themes organized into categories.
5. Third Content review conducted—Second researcher asked to read through interviews and additions made to theme search.
6. Validation of common themes and analysis conducted for meaning.
7. Finalized themes ready for reporting and inclusion in report.

The integrity of the data was important, but the interpretation of the data is what gave credence to its use in this study. The researchers expended a considerable amount of time and energy into the analysis, weaving all the data sources into a comprehensive set of indicators and, in turn, allowed for the rich text descriptors of what was happening in this case.

Results

Three years prior to the opening of the second campus, a new principal was appointed along with a new associate principal. The third administrator at this school was an incumbent. All three school leaders were in place when the second campus opened in September of 2010. During the 1st year of new campus operation, a fourth school administrator was added to the complement, it should be noted that this person was an incumbent teacher at the school. The teaching staff remained relatively constant over the course of the 3 years prior to the opening of the second campus and during Year 1 of operations of the dual campus philosophy. Of the 45 teachers on staff in Year 1 of dual campus, 34 were on staff for the 3 preceding years. Student population was experiencing a slight, if steady, decline. In 2007-2008, total student enrollment was 941; in 2008-2009, enrollment dipped to 933; in 2009-2010, it was 884; and in 2010-2011 (1st year of dual campus operation), it was 856. All quantitative analyses were performed using PASW®18.

Student Engagement

Two measures were used to determine levels of student engagement. The first came from the results of the Student Schollie Survey. The second was a new survey called Tell Them From Me Survey. This second instrument was administered twice. However, both administrations were in the 2010-2011 school year. For this article only, the data from the second administration were used.

Student Schollie Survey Results. Kruskal–Wallis test was used to evaluate whether students' ratings on Student Schollie Survey questions differed over time. The Kruskal–Wallis test found significant differences in the mean rank between the groups for seven of the questions asked. There were differences in the mean rank between the groups (only four of the questions related to significance affecting the 2010 cohort with the 2007, 2008, and/or 2009), $\chi^2(3, N = 1{,}080) = 11.031$, $p = .012$ for Questions 6, 12, 15, and 20. A post hoc Mann–Whitney U test with a Bonferroni correction determined that students from all or one of the 2007, 2008, and 2009 groups were significantly different from the 2010 group.

Question 6: "My teacher challenges me to do my best." Students in 2007, 2008, 2009, and 2010 responded similarly to this question; however, there was a trend toward significance observed between the 2007 and 2010 cohorts ($p = .009$). Students in 2010 responded more favorably to this item than did students from the 2007 cohort.

Question 12: "There are enough learning materials in my classroom." Students from the 2007 cohort responded less favorably to this item than did those from the 2010 cohort ($p = .001$).

Question 15: "I am kept informed of my progress." Students from the 2007 cohort responded more favorably to this item than did those from the 2010 cohort ($p = .006$).

Question 20: "Homework assignments are reasonable." Students from the 2010 cohort responded more favorably to this item than did those from the 2007 cohort ($p = .001$), or 2008 cohort ($p < .001$), or 2009 cohort ($p = .002$).

A factor analysis was used to determine whether there were a small number of core factors underlying the survey completed by students from 2007 to 2010. Missing values were replaced with mean scores leaving 1,082 cases for analysis. Some of the variables were skewed, but were not transformed due to the same response options being used for each variable. Eighty-four multivariate outliers were observed. These cases were excluded from analysis. Principal components extraction was used prior to factor analysis to estimate the number of factors, presence of variable outliers, absence of multicollinearity and singularity, and factorability of the correlation matrix. Four factors were extracted using the maximum likelihood procedure and rotated using a varimax rotation procedure. The factor loadings yielded four interpretable factors: safe and caring learning environment, religiousness, career path and learning opportunities, and technology supports for learning. Factor

1 "Safe and caring learning environment" accounted for 32.9% of the item variance, Factor 2 "Religiousness" accounted for 4.1% of the item variance, Factor 3 "Career support and learning opportunities" accounted for 2.7% of the item variance, and Factor 4 "Technological supports for learning" accounted for 2.5% of the item variance.

Two internal consistency estimates of reliability were computed for the individual items comprising the factors "Safe and caring learning environment," "Religiousness," "Career path and learning opportunities," and "Technological supports for learning": a split half coefficient expressed as a Spearman Brown corrected correlation and coefficient alpha. For the split half coefficient, the scale was split into two halves such that the two halves would be as equivalent as possible. In splitting the items, sequencing was taken into account and individual items were divided so that both halves contained a mixture of odd and even items. All four factors attained better than acceptable reliability values (.7).

The Kruskal–Wallis test found no significant differences in the mean rank between the year-based cohorts for the variables—Safe and caring learning environment, $\chi^2(3, N = 998) = 3.8$, $p = .284$; Religiousness, $\chi^2(3, N = 998) = 5.35$, $p = .148$; Career and supportive learning opportunities, $\chi^2(3, N = 998) = 1.89$, $p = .595$; or Technological supports for learning, $\chi^2(3, N = 998) = 3.11$, $p = .375$.

Tell Them From Me Survey Results. In June of 2011, students at this school participated in the Tell Them From Me Survey conducted by an organization called The Learning Bar (www.thelearningbar.com). This survey compares the school with Canadian norms (see Table 1).

Student Academic Achievement. We examined student academic achievement for the 3 years prior to the study to establish a baseline for comparison with the 1st year of implementation of the dual campus philosophy. Table 2 displays the results as a raw number of Credit Earned Units (CEUs) and the percentage each category represents of all courses completed.

School Accountability Data. We examined the school data that were gleaned from the Provincial Accountability data. This information is contained in Table 3.

Student Interview Feedback. Students were selected by School Administration for inclusion as a candidate for interview—ten Grade 10 students were selected, six Grade 11, and three Grade 12 students were interviewed. All but one of the students had spent some of their years on both campuses. Data from the students revealed three general themes: transportation, friends, and opportunities. These items were addressed by all the students during their interviews. In addition, a number of lesser themes were identified; some, but not all of the students, addressed them. These themes included student-based decision making, small school atmosphere, bringing students together, and communication.

The students recognized that if the School Division had simply created a new stand-alone high school on the west side of the city, then students would not have had access to all specialty courses that were available in the dual campus mode. School of choice would have dictated what courses they would have been able to complete. They also extended that line of thinking to learning spaces like the gym, sports fields, fitness center, hallways, cafeteria, and classrooms. Students understood the importance of having these spaces available to all and not be reserved just for the students who happened to attend that particular building. We could interpret from the responses of the students interviewed that they understood the logic of increased opportunity as a rationale for the dual campus philosophy.

Students also identified two general themes where they felt that dual campuses interfered with their lives. Being separated from their friends and transportation were issues for the students. The money charged by the School Division for transportation was identified as being unfair and that it created a negative image about the dual campus. Transportation was viewed as necessary for getting them back and forth between the buildings, and they were not to be charged. Noon hour transportation was an issue—catching the bus on time and missing opportunities to be with friends. A number of students also identified the confused nature of the transportation system at the start of the year. However, students also appreciated that as the year went on, the system improved.

Student Survey Question 5 had the students think about the rationale for creating a dual campus rather than two stand-alone schools. The question presented a preamble that highlighted the ideas of increased course and extracurricular options available in the dual campus philosophy. They were then asked to weigh this idea against creating two stand-alone schools where students would always be together with their friends yet may not have the courses or extracurricular specialties available. When asked this question, 17 students said they preferred the dual campus, 2 said they would rather have the single school even if it meant less courses and extracurricular options. The following are direct quotes from what they said:

> I prefer the dual campus because even though I have to transfer between schools I get more opportunities to do different things like preengineering class. I'm taking pre-engineering and it wouldn't have been available without the dual campus. (Student 1)

> I definitely would want the two campuses because you know the traveling is annoying but it's not so annoying that you wouldn't want all of the opportunities that you have. (Student 2)

> The two campuses . . . the same school on two campuses. I didn't mind it with the sports cause in Quarter Two I was East in the morning, West in the afternoon, and then East after school again. But you don't really . . . you think "oh you're going over the bridge three or four times a day" it doesn't seem like it. So

Table 1. School and Canadian Results From the Tell Them From Me Survey.

Outcome and question	School total	Nation total	Grade 10 school	Grade 11 school	Grade 12 school
Students with a positive sense of belonging: Students feel accepted and valued by their peers and by others at their school.	77%	69%	67%	83%	79%
Students with positive relationships: Students have friends at school they can trust and who encourage them to make positive choices.	82%	77%	82%	81%	82%
Hours per day spent volunteering: During a typical week day (i.e., Monday to Friday), the average time students spend volunteering.	0.7 hr	0.3 hr	0.25 hr	0.06 hr	0.09 hr
Students that value school outcomes: Students believe that education will benefit them personally and economically, and will have a strong bearing on their future.	66%	66%	82%	71%	57%
Students that are regularly truant: Students skip classes or miss days at school without a reason, or arrive late for school or classes.	36%	38%	16%	33%	45%
Students with positive homework behaviors: Students do homework for their classes with a positive attitude and in a timely manner.	57%	43%	58%	57%	56%
Students who are interested and motivated: Students are interested and motivated in their learning.	21%	25%	33%	23%	18%
Students who are trying hard to succeed: Students try hard to succeed in their learning.	65%	65%	79%	60%	64%
Skill challenge: Students feel challenged in their language arts, math, and science classes and feel confident of their skills in these subjects.	52%	47%	NA	NA	NA
Mean GPA in language arts: Students' overall marks in their current or most recent language arts class (e.g., English) were converted to a GPA with a total value of 4.3.	3.2	3.0	3.2	3.4	3.1
Mean GPA in math: Students' overall marks in their current or most recent math class were converted to a GPA with a total value of 4.3.	2.8	2.8	3.1	3.0	2.7
Mean GPA in science: Students' overall marks in their current or most recent science class (e.g., general science, biology, chemistry, or physics) were converted to a GPA with a total value of 4.3.	3.1	2.9	3.1	3.1	3.1
Effective learning time: Important concepts are taught well, class time is used efficiently, and homework and evaluations support course objectives (score rated out of 10).	6.5	6.3	6.5	6.5	6.5
Relevance: Students find classroom instruction relevant to their everyday lives (score rated out of 10).	5.4	5.6	5.5	5.9	5.1
Rigor: Students find the classroom instruction is well organized, with a clear purpose, and with immediate and appropriate feedback that helps them learn (score rated out of 10).	6.4	6.0	6.6	6.1	6.4
Advocacy at school: Students feel they have someone at school who consistently provides encouragement and can be turned to for advice (score rated out of 10).	2.5	2.5	3.0	2.1	2.4
Positive teacher–student relations: Students feel teachers are responsive to their needs, and encourage independence with a democratic approach (score rated out of 10).	6.3	5.8	7.2	6.3	5.8
Positive learning climate: There are clear rules and expectations for classroom behavior. Students understand these and teachers maintain high expectations that they be followed (score rated out of 10).	6.0	5.8	6.7	5.9	5.7
Expectations for success: The school staff emphasizes academic skills and hold high expectations for all students to succeed (score rated out of 10).	7.1	6.9	7.8	7.2	6.8
Students planning to finish high school: Students plan to finish high school	88%	84%	84%	90%	89%

Note: GPA = grade point average.

Table 2. CEUs and Percentage of Courses Completed.

	2007		2008		2009		2010	
	CEUs	%	CEUs	%	CEUs	%	CEUs	%
CTS	4,243	11.1	4,637	12.4	3,939	11.1	4,220	12.7
Fine arts	1,470	3.8	1,610	4.3	1,940	5.5	1,490	4.5
Core	22,150	57.8	20,900	56.0	19,825	56.0	18,590	56.0
Options	7,900	20.6	7,783	20.8	7,810	22.1	6,860	20.7
RAP/WE	1,507	3.9	1,540	4.1	1,165	3.3	1,348	4.1
Languages	1,070	2.8	875	2.3	740	2.1	680	2.0
Total CEUs	38,340	100.0	37,345	100.0	35,419	100.0	33,188	100.0

Note: CEUs = Credit Earned Units; CTS = Career and Technology Studies; RAP/WE = Registered Apprenticeship Program and Work Experience. CTS includes courses like food, construction technology, and pre-engineering. Fine arts includes art, music, and drama. Core blends together courses from the English, social studies, mathematics, and science streams. Languages include courses from the French, Spanish, Japanese, and Blackfoot programs.

Table 3. Accountability Data Comparing Previous 3 Years With the 2010-2011 School Year.

	Catholic Central High School			Alberta		
Measure	Current result	Previous year result	Previous 3-year average	Current result	Previous year result	Previous 3-year average
Safe and caring	87.7	87.0	87.6	88.1	87.6	86.6
Program of studies	83.3	84.8	85.7	80.9	80.5	80.1
Education quality	87.7	87.8	89.9	89.4	89.2	88.9
Drop-out rate	3.4	3.7	3.7	4.2	4.3	4.7
High school completion rate (3 years)	80.7	77.5	76.7	72.6	71.5	71.1
Diploma: Acceptable	86.5	84.8	84.5	82.6	83.4	84.0
Diploma: Excellence	17.7	16.5	19.2	18.7	19.0	18.9
Diploma exam participation rate (4+ exams)	51.5	52.3	52.5	54.9	53.5	53.5
Rutherford scholarship eligibility rate (revised)	71.7	65.6	65.4	59.6	56.9	57.0
Transition rate (6 years)	68.4	72.9	71.0	59.3	59.8	59.3
Work preparation	81.5	80.5	84.9	80.1	79.9	79.8
Citizenship	80.6	75.6	78.9	81.9	81.4	79.9
Parental involvement	77.2	76.6	81.4	79.9	80.0	79.4
School improvement	80.4	81.7	81.1	80.1	79.9	78.8

> I'm able to do a little bit of traveling and still play all of the sports I want to play. (Student 3)

> Well, as I said, there is the problem that some courses are only offered on one campus. Like in my case, I was forced to go to the East Campus to get into the math advanced placement course. So I had to take the bus back and forth between the campuses but offering more courses, it is good for everyone. I am glad that I have more options to take . . . I'm really happy about it. (Student 7)

> Especially for Grade 12 kids that are figuring out what program they want to get into in university or college or whatever. And if they don't have the chance to find that out then I don't think they . . . I don't think the one school that has less programs would be able to help them out very much. (Student 9)

Student 14 related that he or she would have liked to have seen just one campus and defended that position by saying,

> I'd probably say the one school with less programs. Even though it's nice with all the new options that we have. But sometimes it's hard to access them with the whole shuttling thing. So I'd probably say just the one campus with less options.

Teacher Efficacy

Interpretations about the concept of teacher efficacy, and the degree to which it changed or remained constant, were made from data gathered from the Teacher Schollie Survey, the OSTES, and from teacher interview feedback.

Teacher Schollie Survey Results. The Kruskal–Wallis test found significant differences in the mean rank scores across the different years only for Question 21, which was about the overall communication between the jurisdiction and the school: $\chi^2(2, N = 94) = 8.578, p = .014$. There were four missing values in total—three for 2008/2009 and one for 2010/2011. Missing values were not replaced. Post hoc Mann–Whitney *U* tests with a Bonferroni correction determined that teachers' satisfaction ranking to this question was significantly lower in 2008 than they were in 2009 or 2010. Rankings for 2009 and 2010 were similar.

OSTES. "Teacher efficacy has proved to be powerfully related to many meaningful outcomes such as teachers' persistence, enthusiasm, commitment and instructional behaviours, as well as student outcomes such as achievement, motivation, and self-efficacy beliefs" (Tschannen-Moran & Hoy, 2001, p. 783). These researchers also claim that the OSTES has the validity and reliability to allow its use in schools and for interpretations to be made.

Instructional efficacy mentions items related to the ways in which teachers instructed students. Items pertaining to assessment, questioning, extra help, teaching strategy diversity, learning levels of students, and appropriate challenges were assessed in this area.

Management efficacy looked at items related to student control and the ways in which teachers dealt with behavior. Items pertaining to behavior, following rules, calming students, management systems, defiance, disruption to learning, and expectations were assessed in this area.

Engagement efficacy meanwhile looked at items related to setting the conditions necessary to get students to want to learn. To that end, items pertaining to students believing in themselves, value of learning, motivation, role of families in student learning, thinking critically, and fostering creativity were assessed in this version of the concept.

The norms generated from three separate validity and reliability studies present the following categories of efficacy as measured by the OSTES: Instruction ($M = 7.3$, $SD = 1.1$), Management ($M = 6.7$, $SD = 1.1$), and Engagement ($M = 7.3$, $SD = 1.1$). The *OSTES* was completed by 21 teachers. The results for this group of teachers were as follows: Instruction ($M = 7.2$, $SD = 0.79$), Management ($M = 7.76$, $SD = 0.65$), and Engagement ($M = 6.6$, $SD = 0.89$).

Teacher Interview Feedback. As with the student responses, we also see some general themes emerging from across the responses provided by the teachers. The themes identified are programming/opportunities for students, organizational difficulties, and the importance of team atmosphere. Each of these general themes was made up of subthemes. The theme of programming/opportunities included new courses, spaces for students to learn (gym, science labs, library), and less crowding. The organizational difficulties theme referred to transportation and travel glitches, lack of vision as the campuses opened, lack of support from School Division, and timetabling issues. The theme of team atmosphere included items like small school atmosphere, feeling part of the organization, confidence in the ability of staff to make it work, and the pride of doing something special and new as well as being something that nobody had ever done before.

Programming-type comments were the most often stated, positive and negative, about the new system. Teachers identified the ability of students to take courses that were of interest to them as being the driving force for the construction of the new school and that it was the reason they were most in favor of the dual campus philosophy. Included in the programming comments were those associated with the usefulness of the new learning spaces that came with the building. The gymnasium, fitness center, science labs, preengineering lab, and the new library were singled out for special mention and the positive impact they had on student learning. The teachers also identified that crowding had been a major issue in Campus East prior to the second building's opening. The crowding issues were alleviated with the second building. Coaches appreciated the availability of the second gym.

Transportation was addressed as a major issue with the start of the dual campus philosophy. It was identified as the issue that should have been better thought out prior to opening the second campus. However, teachers also acknowledged that as the year progressed, most of the issues were rectified. They were clear in their condemnation of charging students for transportation, as it did not send out a message of support for the dual campus. Travel was also mentioned in connection with students and teachers needing to go between campuses at noon. There was a general sense that this should not be necessary. The travel issue tied directly into the whole idea of organizational leadership. Teachers felt that more technical type issues associated with the dual campuses could have been rectified with increased communication and committee type meetings focused on problem solving. Even though the teachers recognized the shared ownership they felt in the concept's design, it was a little less evident with the opening of the second campus itself.

There was a very strong sense of teacher efficacy in the comments made during the interviews. Teachers spoke about the pride they had in the creation of something new. They also acknowledged the importance of the feeling of "team" that the planning for the dual campus philosophy helped create. Teachers addressed the fact that the change allowed the school to return to a small school environment, only this time, it was in two buildings rather than one. Yet, they also expressed comments that indicated that some of that good feeling associated with the new campus being opened dissipated as the realities of how difficult it would be to make the system work actually sunk in. There was also a bit of a divergence of opinion between comments made by experienced teachers and those new to the school. The experienced teachers, those who also played a major role in planning for the

new campus, were much more adamant about how the dual campus was contributing to the life of the school, the students, and to teaching. While new teachers felt the system was helping students in the school, they also felt that the work associated with making it work was onerous.

Data, quantitative and qualitative, present evidence of a system that is working. Students and teachers interviewed acknowledge some of the growing pains associated with the change inherent in the dual campus philosophy being implemented. The survey data paint a picture of a continuation of the existing norms connected to the way in which students viewed the organization the 3 years prior to dual campus opening. The same is true for the teacher survey data—continuation of the norm from the 3 previous years. Attention now needs to be turned to making sense of these data and drawing from them statements that can be made in relation to student engagement impact, teacher efficacy influences, and student programming connections.

Discussion

In a nutshell, the question of "what has been the impact?" still needs to be answered. In this section of the article, we will take a look at what has been the impact on student engagement, staff efficacy, and student programming options and achievement.

Student Engagement

The data gleaned from the Schollie Surveys have been informative in that very little, if any, change occurred in the way the students perceived their school, the staff, and their place in the organization. We expected to see a change in the way students completed the Student Schollie Survey as the students of this school just underwent a major change in the structure of their school. Students, however, answered questions like, "The staff at my school care about me," "I am satisfied with the extracurricular activities," "I am satisfied with the opportunities to make decisions about how I learn," "My teachers help me learn," "Students are encouraged to become involved in school activities," "There is a Christian attitude among the staff," and "The school provides opportunities for students to become involved in volunteer activities and community service" in much the same way in 2010 as they did in any of the 3 previous years. These questions cover diverse areas of student relationship to the school and the learning program. They also connect to various understandings of student engagement. The results from this survey reinforce the findings of the NRC (2005) when they made it clear, "Successful high school reforms convey high expectations and promote a sense of competence in a student's ability to succeed, feelings of control over academic outcomes, beliefs in the value of education, and a sense of belonging and respect" (p. 3). Furthermore, the data support the NRC's conclusion, "Effective schools and effective teachers provide support and help students understand what it takes to learn and succeed in school" (p. 3).

The data gleaned from the Tell Them From Me Survey present evidence of a school community that is attempting to make a difference in the lives of its students through the work of its teachers and staff. It is interesting to note that the school presents as average (the scores for this school are similar to those in the national sample) for items like "Students that value school outcomes" or "Students are regularly truant." Yet, this school's results for items that go to the heart of the teacher–student relationship are significantly higher than those from the national norm. The evidence from the Tell Them From Me Survey reinforces what the Student Schollie Survey data were saying. We can interpret from the data that the teacher–student relationship is sound, that there is positive learning climate, and that expectations are high yet reasonable.

From the interview data, we are able to infer that the students are satisfied with the change to the dual campus organizational structure. They understand the rationale for the change occurring and are willing to give the school a chance to make the new structure work for them. However, the school needs to be aware of some dark clouds on the horizon when it comes to long-term acceptance of the new order. First and foremost, the school needs to be aware of the need to continue to provide opportunities for teachers and students to connect and to form healthy relationships. To do so, the transportation issue is going to have to be resolved. Having students pay for a bus pass to go from one campus to the other will not be sustainable from the students' point of view, nor will the continued requirement of students being forced to move between campuses at the noon hour. In rare cases, where students want particular teachers, noon hour movement might have to continue. Change needs to happen to create opportunities in both buildings for core courses (science, social studies, English, math, religious studies, etc.) to occur in such a way that students need only to make the choice of campus based on the specialty program (pre-engineering, new media, languages, fine arts, etc.) they want to take. By keeping student movement at noon hour to the minimum, the school can then take full advantage of the "Flex Time" that is built into the system and allow for greater teacher–student interaction. The school will need to pay attention to teachers not moving back and forth at the noon hour—for the same reason that it is not prudent for students. The movement interferes with the development of the healthy interactions that build positive school culture.

Second, the students are accepting of the fact that the second campus was needed for programming-type issues. That point appeared as significant in each of the student interviews. However, students noted that as the year progressed, some of that rationale was starting to wear a little thin. Transportation glitches made the point obvious, but other less obvious issues like lack of course availability were also being noted. Foods class was identified as a prime example.

With the new school came a second Foods Lab, yet the number of sections of Foods dropped from the previous year to the year of opening. They also recognized that a course with a large Career and Technology Studies (CTS) lab attached was not even offered once the new school opened. To keep the programming issue alive, and well accepted, the school will need to remain vigilant in its quest to have the specialty programs available to students.

Third, the students spoke about being involved in the decision-making process. Yazzie-Mintz (2006) highlighted the importance of student voice being taken as valuable. Yazzie-Mintz indicated that valuing student opinion was a means to increase student engagement. When students believed that their voices were not being heard, they became less engaged and in turn less inclined to do well at school. Being heard may become an issue in the next few years with this school. Students mentioned in their interviews that since the start of the new school year, they felt people were too busy to pay attention to them. The school should be searching for ways for the student voices to be expressed and to be shown to make a difference in the way the dual campus evolves.

Fourth, the work of Lee and Smith (1995), even though it is getting to be dated, provides a sounding board for change and its impact on students. They highlighted the need for schools that are attempting large-scale change to be viewed as organized and focused on making the project successful. Some of the students noticed that the change to the dual campus organizational structure was not as smooth as it should have been. If the reform effort is to prove to be long lasting and having a positive impact on students, then the involvement of students themselves in the planning process will be required.

Finally, the issue of small school environment showed through in the feedback from students. They did not address the issue directly but mentioned in their statements the different "feel" that now existed in the two buildings—less students in the hall, more classrooms being available, more opportunities to talk to teachers—Campus West having a calming effect on people. The atmosphere of a small school needs to be addressed and used as an area of strength and growth within the school culture.

Staff Efficacy

One of the most salient points that arose from the data was one of the long-standing teachers viewing the move to dual campus in a much more positive light than teachers new to the school. Both groups, according to the interview feedback, were willing to work with the new organizational structure and that they could see the positives built into the system, yet there was a difference in perspective between the two. Bandura (1993) stated, "Teachers' beliefs in their personal efficacy to motivate and promote learning affect the types of learning environments they create and the level of academic progress their students achieve" (p. 1). The more experienced teachers spoke about their roles in helping shape the way the dual campus philosophy was developed and implemented. They were able to relate the roles they played individually to the way the project came together in the planning phases and, in turn, its implementation. The newer teachers did not have the same track record with the project and, therefore, interpreted the impact of the change in a more negative light. Even the experienced teachers, however, spoke about the need to bring back a greater commitment to committees and individual teacher input into the running of the school and making the dual campus philosophy work in the future.

As we do not have longitudinal data from multiple administrations of the OSTES, we are careful about drawing too many conclusions about that aspect of teacher efficacy. However, we do note the major difference in the Engagement score from the school norm to that of the norm established in the OSTES itself. The OSTES mean was 7.3, while the school's mean was 6.6 when dealing with questions related to the teachers' impact in helping to get students engaged. This item will need to be monitored over the next few years.

As with the students, it was interesting to see that in the Teacher Schollie data, however, there was virtually no difference in the way the teachers of this school perceived the school during the 1st year of dual campus operations than the ways in which they perceived the organization in the previous 2 years. These data speak about the resiliency of teachers in accommodating themselves to new ideas, especially if they have a say in shaping what the idea looks like.

Interview data revealed a number of issues that school leadership will need to address. Transportation and movement back and forth between the campuses will need to be studied. Evidence from data suggests that teachers' lives should be brought into the equation as the school tries to deal with the issue of movement at noon. Teachers expressed a need to be on one campus for the day, and that movement from quarter to quarter would work much better for all concerned.

The data also suggest that the system is working as well as it is because the teachers believe it was the best decision the school could have made. The teachers interviewed were clear in their desire to not see a separate and discrete school as being a better option. The teachers also believed that student programming was a driving force for the new system and that collectively they could find ways to better deal with making the programs work for students. A number of teachers, however, mentioned in their interview that if the school could not develop more effective ways for teachers to get together with colleagues, perhaps they would have to revisit the structure.

Engagement and Student Academic Success

A statistically significant correlation between student engagement and academic success cannot be made from the data that we collected. In this study, all we can do is present some observations.

The theoretical framework of this article presented research that made connections between the importance of student engagement and student achievement at school. We will use their findings to make a generalization that if student engagement scores go down, so too will their achievement. That if students feel less connected to the school, believe that the teachers are not really there to support them, that the comfort and warmth they feel when they get to school is lessened in some way, then a corresponding drop in achievement will in all likelihood occur (Dewey, 1938; Finn & Voelkl, 1993; Lee & Smith, 1995; NRC, 2005; Willms et al., 2009; Yazzie-Mintz, 2006).

The data from this study present a picture that student engagement remained relatively constant in the 1st year of the dual campus implementation. However, we see some interesting changes in a number of achievement areas. Table 3 presented the achievement data for the school year 2010-2011 and compared the results with the 3 previous years. From these data, we see relatively constant results for items "safe and caring," "program of studies," and "education quality." We also noted a healthy increase in "high school completion rates" and a positive drop in the "drop-out rate," while scores associated with student academic achievement either stayed the same or increased. What is most remarkable about the achievement scores is a full 2% increase in students receiving an acceptable score on their provincial diploma exams. This score is further highlighted by the fact that in the same year, the percentage of all students in the province achieving an acceptable score went down by 1.4% from the 3-year average.

Programming was also affected by the move to dual campus. A programming area that achieved a dramatic increase in student enrollment was that of CTS, an increase that came in part due to the offering of a preengineering program. Students flocked to the course. The school had only planned on offering one or two sections, but, in the end, offered six. Other areas like fine arts, options, and Registered Apprenticeship Program and Work Experience (RAP/WE) remained relatively constant. Languages experienced a decline in enrollment, one that had been steadily occurring for the previous 3 years. Core courses (English, science, math, social studies) also remained relatively constant. From these data, we can extrapolate that by keeping the two buildings together as one school, they were able to achieve continuity of program. In other words, the dual campus fulfilled its mandate of keeping programming options for students as flexible and achievable as possible.

Students remained engaged to the same degree they were prior to the second campus being implemented, teacher efficacy remained similar to previous years, and student programming and achievement remained constant or experienced a small upswing. We are left with the opinion that the school was able to achieve that which it set out to do. However, we must be cognizant that it is too early to draw too many solid conclusions. For the next 2 years, the surveys will be readministered, achievement results will be analyzed, and students and teachers will be interviewed. Future findings will provide evidence of the impact of the dual campus organizational structure on student engagement, student achievement, and teacher efficacy.

Acknowledgment

The author would like to thank Shawna Romolliwa and Erica Parr for their research assistance.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research and/or authorship of this article: This study was supported by a grant from the Alberta Advisory Committee for Educational Studies (AACES).

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