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Creating a School Climate of Belonging and Engagement Through Visionary Leadership and Student Art

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Abstract

This research adopted a case study methodology to investigate how student artwork helped establish a school climate that was intentionally inviting to students and the wider school community. Through the visionary leadership of two principals, a Kindergarten to Grade 5 school and a middle school enhanced their common areas through student visual arts projects. Previous research on school physical environments focused on safety, cleanliness, and noise levels. This paper addresses a research gap, identifying the role that physical environments played in promoting a positive school climate which in turn promoted students' sense of belonging and engagement.

Keywords: school climate, school culture, belonging, engagement, invitational theory

Disclaimer: Any students' names that might appear in figures have been carefully screened to ensure that no current students' names appear. In any case, the school names are pseudonyms and the city is not identified.

Introduction

This paper examines two case studies in which school leaders used art to foster school climates of belonging and engagement. The key role of the principals' collaborative leadership style and vision were identified as significant factors in the success of both initiatives.

Case Study 1

A principal opened a new Kindergarten to Grade 5 school with an enrolment of more than 800 students. All the students were at different schools the previous year and had no allegiance to

the new school, the new staff, or the new building. The principal looked for ways to foster a school climate of belonging and a sense of community among her students. She also wanted to encourage the student body to become engaged in their learning and in their new environment.

The school was in a very new area of a city in Southern Ontario with a population greater than half a million. Locally, construction of new homes continued at a brisk pace. The school's population was very diverse and many students were new to the country. The principal was an experienced, award-winning administrator who had been able to select all the staff for the new school; thus, there were no established school cultural dimensions to modify. The entire staff was energetic and innovative, and this stance was encouraged and supported by the principal.

Case Study 2

A middle school principal is notified that as part of routine maintenance, his school is scheduled to have the hallways and common areas repainted. The principal is looking for ways to foster a school climate of belonging and to increase student engagement. Uniting these two disparate events through the principal's unique vision gave birth to the school art project.

The school had 482 students and was located in a well-established neighborhood of a city with a population of 500,000 in Southern Ontario. Approximately half the students were bussed. Many of the students were new to the country. The student population was very diverse and did not exhibit much cohesion nor loyalty to the school. The principal had substantial experience and was familiar with the area in which the school was situated. It was his first year at the school. He had served as vice-principal under the leadership of the principal from Case Study 1 and had learned from her leadership style the importance of stakeholder buy-in to facilitate change.

Theoretical Perspectives

Several theories impact the case studies, including self-determination theory, stage-environment fit theory, and invitational theory.

Self-Determination Theory

Self-determination theory (SDT) identifies three fundamental student needs: autonomy, competence, and relatedness (Deci & Ryan, 2008). Autonomy is the need for control over one's activities (in this case, learning); competence is the need for students to feel that they have mastered a particular topic and to be recognized for such expertise; and relatedness is the need for students to interact socially with others (Deci et al., 1991). There is significant evidence that students who are more engaged in their own learning have higher achievement (Connr & Pope, 2013; Deci & Ryan, 2008; Irvine, 2018a).

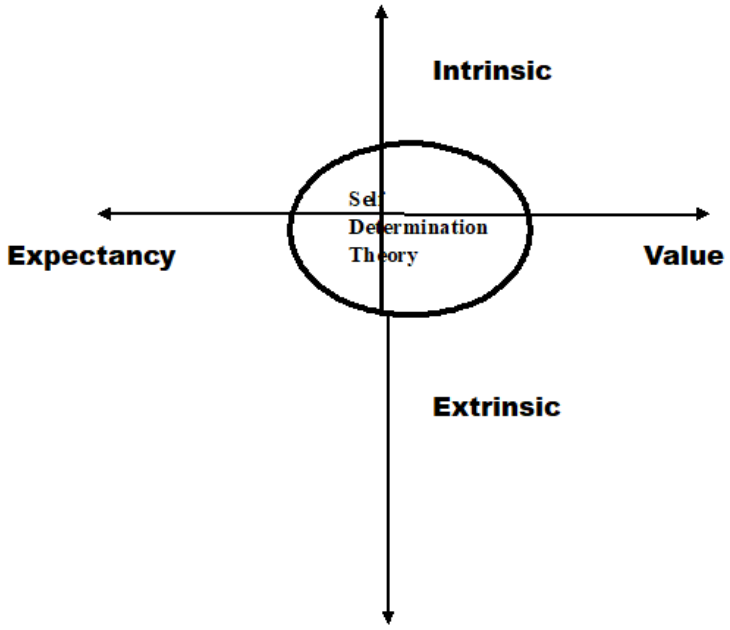
SDT is highly correlated with motivation, particularly intrinsic motivation—the desire to learn for the sake of learning. Intrinsic motivation is key to self-regulation, interest, engagement, and lifelong learning (Deci et al., 1991). Research by Ryan and Deci (2000a, 2000b, 2006) confirms a direct link between autonomy and intrinsic motivation: Intrinsic motivation requires autonomy in the form of free choice to participate in an activity, without requiring or desiring an external reward.

SDT can be represented graphically on two perpendicular axes. The vertical axis represents motivation, with extremes of intrinsic and extrinsic motivation. The horizontal axis illustrates expectancy-value theory (Eccles & Wigfield, 2002). Eccles and Wigfield (1995) identified two facets of student motivation: expectation that the student can succeed on a task (expectancy of success) and the personal value that a student places on the task (value). The higher the task scores on both these dimensions, the more likely the student will engage in the

task and persist in successfully accomplishing the task. Figure 1 illustrates the location of SDT on these dimensions.

Figure 1

Self-Determination Theory



Note. Reproduced with permission from Irvine (2018a).

SDT is almost entirely on the intrinsic side of the axis, although some aspects of relatedness may be influenced by extrinsic factors. Competence lies on the expectancy side of the axis, while autonomy is on the value side of the axis (Irvine, 2018b).

SDT is closely related to Glasser's (1998) choice theory which identifies five basic needs: survival, freedom, power, belonging, and fun. Freedom is directly analogous to SDT's autonomy; power is analogous to competence; and belonging is analogous to relatedness. SDT does not reference survival (probably assumed) or fun, although fun can be part of any of the three SDT needs.

SDT is a powerful lens through which to view student motivation and engagement. With

knowledge of SDT, teachers can tailor pedagogy and instructional strategies to support student needs as reflected in SDT (Irvine, 2018b).

As students grow and mature, the relative positions of the three needs—autonomy, competence, and relatedness—change in their hierarchy. For example, children often demonstrate the need to exhibit competence, while for adolescents, the social need for relatedness may become more dominant. In general, the need for autonomy increases with age; middle school students seek more autonomy than elementary students, while secondary school students seek even more autonomy as they approach young adulthood.

Stage-Environment Fit Theory

Stage-environment fit theory (Eccles, Midgley, et al., 1993) examines the congruence between a student's stage of development and their educational environment. For example, a student starting kindergarten typically needs a warm and empathetic teacher as they negotiate being away from their home and familiar surroundings. At the same time, the teacher must be able to establish boundaries and promote the student's socialization. Stage-environment fit theory is especially important as a student progresses through adolescence. As a child grows and develops through adolescence to young adulthood, they progress through a myriad of changes. These changes include puberty and its associated physical and emotional changes; growing cognitive development; increased importance of peers, social activities, and sexual feelings; and a growing need for autonomy and decision-making (Deci & Ryan, 2008). These changing needs may lead to conflicts with parents, possibly anti-social behaviours, and in extreme cases, delinquency (Gutman & Eccles, 2007).

A significant misfit between developmental stages and educational environments often occurs in the transition to middle school or junior high school (Eccles, Wigfield, et al., 1993;

Eisenbach & Greathouse, 2020; Zoller Booth & Gerard, 2014). The student needs more autonomy and choice, as well as more challenging cognitive tasks and the ability to be included in decision-making. Frequently what the educational environment provides is a greater focus on discipline and classroom management, low-level cognitive tasks, more structure and less autonomy, and little or no role in decision-making for the student (Eccles & Roesser, 2008). The result of this mismatch of environment with developmental stage is reduced student motivation, lack of engagement, apathy, and in extreme cases, total disengagement and dropouts (Eccles, Midgley, et al., 1993; Eccles, Wigfield, et al., 1993).

The education system has a very poor record concerning congruence between developmental stages and supportive environments. Virtually every child begins school with high levels of intrinsic motivation. This begins to decline the very first day of school, and continues to decline until about age 16, when it reaches a minimum and never gets any better (Middleton & Spanias, 1999). This is a major concern as there is abundant research linking motivation and student achievement (Conner & Pope, 2013). Clearly, whatever steps that can be taken to encourage a more supportive educational environment appropriate for the student's developmental stage should be taken, including consideration of school culture, school climate, and school physical characteristics.

Invitational Theory

Invitational theory (Purkey & Novak, 1996) states that an institution or person issues invitations to others by their cultural norms—words or actions. This applies not only to individual teachers but also to the school as a whole. The four invitational stances are intentionally disinviting, unintentionally disinviting, unintentionally inviting, and intentionally inviting. It is rare for an educational setting to be intentionally disinviting. Occasionally there

may be a teacher who, through ignorance or bigotry, targets a subset of students (e.g., stereotypical threat; see Eccles & Roeser, 2008), but overall schools are not intentionally disinviting. However, schools may be unintentionally disinviting—monolithic, foreboding structures, or cathedral-like buildings that convey a sense of exclusivity may be unintentionally disinviting to students and the entire community. If this is the case, school leaders need to take steps to alleviate the problem, possibly through outreach programs and physical modifications to buildings.

Schools may be unintentionally inviting; a part of the community but not a leading light for students and parents. Schools need to be intentionally inviting, as should interactions between teachers and students. Schools need to proactively seek to make the schools a welcoming, safe space for students; a place where students look forward to entering and learning. The invitations may be conveyed through physical setting, such as the overall appearance of the school and its classrooms, and whether the ambiance is inviting or disinviting. In addition, the behaviours of the staff and administration will impact whether students see the school as intentionally inviting. This may be particularly important in situations where students are new to the school or new to the country. Students whose first language is not English may feel disinvited since the school climate and culture may not reflect familiar norms and practices.

Review of the Literature

Several research areas are relevant to this case study. Among these are students' sense of belonging; school culture and school climate; student engagement and motivation; and principal leadership styles.

Students' Sense of Belonging

Allen et al. (2018) state that “Belonging is an essential part of psychological functioning. Schools offer unique opportunities to improve belonging for school-aged children” (p. 1). A commonly used definition of school belonging is “the extent to which [students] feel personally accepted, respected, included, and supported by others … in the school social environment” (Goodenow & Grady, 1993, pp. 60–61). Consequences of a strong sense of school belonging include increased academic motivation, more engagement, less truancy, less negative behaviours, positive attitude towards learning, increased self-efficacy, increased happiness, less bullying behaviours, and less substance abuse (Allen et al., 2018; Callum, 2021; Cortina et al., 2017; Kalkan & Dağlı, 2021; Ma, 2003; Osterman, 2000).

Belonging is an important factor in student success and is also a key element in a child’s healthy psychological development (McCabe et al., 2024; Thomson et al., 2024). School connectedness, in turn,

> is the degree to which students experience acceptance, inclusion and care by school personnel and peers. A sense of belonging incorporates an emotional connection to the community. School connectedness and belonging are protective factors that promote student engagement, accomplishment, and community performance. (McCabe et al., 2024, p. 233)

By examining PISA data to identify correlates of school belonging, Lim et al. (2024) found 32 factors related to school belonging; among these were student–teacher relationships, student–peer relationships, learning/and physical environments and activities, and overall school satisfaction. Abdulhamed and Beattie (2024) also found that student–teacher relationships were critical, especially for students new to the community or new to the country. These results were echoed by Lepojevic and colleagues (2024).

Osterman (2000) conducted an extensive review of the literature on school belonging. She found that many students have feelings of isolation, alienation, and polarization, and that such feelings can be lessened by developing a sense of belonging. Osterman emphasized that belonging is essential to positive psychological development, in line with SDT, and that sense of belonging can explain a large portion of student behaviours. However, Osterman also found that frequently the education system does not pay attention to or develop sociocultural dimensions.

In their meta-analysis of the literature on belonging, Allen et al. (2018) identified 10 themes related to belonging in schools: academic motivation, emotional stability, personal characteristics, parent support, peer support, teacher support, gender, race and ethnicity, extracurricular activities, and environmental/school safety.

Students' sense of belonging is a multidimensional construct (Green et al., 2016). Abdollahi et al. (2019) identify six dimensions of belonging in the school belonging scale, which comprise connecting with teachers, peers, parents/caregivers, oneself, learning, and professional help and support, respectively.

Various studies have reported that school belonging is related to student achievement, with increases in student achievement occurring when students' sense of belonging increases (Allen et al., 2018; Callum, 2021; Cortina et al., 2017; Kalkan & Dağlı, 2021; Osterman, 2000). However, there are some discrepancies in the literature regarding whether student achievement is a component of sense of belonging or an outcome of sense of belonging (Pope & Miles, 2022). Most researchers treat student achievement as an outcome variable, which is consistent with the literature identifying sense of belonging, mediated by motivation and engagement, as a predictor variable of student achievement.

There has been a strong cultural component reported for sense of belonging, with Asian and Hispanic students having a higher sense of belonging than either Whites or Blacks (Brooms, 2019; Cortina et al., 2017). The cultural component is particularly important for immigrant families (Crul, 2018). Transitions to different and unfamiliar physical locations are disruptive and sometimes even traumatic to students' sense of belonging (Eccles & Roesser, 2008; Lynch et al., 2013; Thomson et al., 2024). Immigrant students frequently have difficulty fitting into new surroundings, particularly if they are racially or ethnically different than the majority of the school population (Cortina et al., 2024; Martin et al., 2024; Ocegueda et al., 2025; Thomson et al., 2024). It was also found that immigrant students were less likely to engage in the school community and were less likely to join school clubs and teams (Mak & Fancourt, 2021; Temel et al., 2024). However, school belonging and immigrant students remains an understudied phenomenon (McCabe et al., 2024).

This has implications for students in both of the case studies in this paper. In Case 1, the new school was located in a rapidly growing new section of the city. Most students had already been housed in multiple locations; some students entering Grade 5 at the new school had been in four or even five previous schools. Thus, the students' sense of belonging was limited at best. For the students in Case 2, in addition to the transition to middle school from elementary school, there was a high proportion of recent immigrants to Canada. For these students, this was the ultimate transition: from the culture and country of their birth to a new land with differing social norms, culture, weather, and language. For these students, their sense of belonging was dramatically reduced.

Sense of belonging is strongly related to student engagement (Osterman, 2000). In describing actions that support students' positive sense of belonging, Fail et al. (2004) echo the

tenets of stage-environment fit theory; teachers need to produce challenging lessons of interest to the students, support student autonomy and choice, allow students to play a role in decision-making, and listen respectfully to student opinions and questions. School belonging can be improved through the mediator variable of school climate (Ma, 2003).

School Culture and School Climate

As Walls et al. (2021) aptly note, "A positive school climate is a critical part of students' social and emotional growth experience as adolescents learn, mature and begin to make sense of their experiences with the help of adults and peers" (p. 749). Yet, the terms school culture and school climate are not treated consistently in the literature. Some researchers treat the two terms as synonymous (e.g., Demiroz, 2020). Roby (2011), who surveyed 195 teachers to identify key characteristics of school culture and assess the impact of school culture on student achievement, treats school climate as a subset of school culture. Pritchard et al. (2005) in turn consider school culture to be a subset of school climate and recognize that school climate is an important factor in students' need for belonging.

MacNeil et al. (2009) offer a useful way of distinguishing between school culture and school climate: School culture consists of abstract elements while school climate is observable and measurable. MacNeil et al. state that school climate is a measure of the health of a school, while Demiroz (2020) identifies school climate as a measure of the quality of a school.

There are over 150 definitions of school culture (Meier, 2012). Most definitions have commonalities, such as vision and mission, norms, values, leadership, routines, and procedures (Demiroz, 2020; Goldring, 2002; Gruenert, 2005; L'Esperance, 2001; Meier, 2012 Pritchard et al., 2005). MacNeil et al. (2009) list 10 dimensions of school climate that can be measured: goal focus, optimal power equalization, resource utilization, morale, innovativeness, autonomy, adaptation, problem-solving adequacy, communication, and cohesiveness. These dimensions

may be written or unwritten, sometimes assumed. Characteristics of a positive school culture are identified as clear and shared vision, collaboration, innovation, shared decision-making, communication, and caring teachers and principals (Demiroz, 2020; L'Esperance et al., 2001; Meier, 2012; Pritchard et al., 2005; Roby, 2011).

In a study using over 2,000 student essays, Gruenert (2005) identified the key dimensions of school climate as: social/people, extracurricular activities, curriculum, physical facilities and resources, and codes and rules. These dimensions provided a measurable set of school qualities to identify correlates with effective schools versus less effective schools. Gruenert found that for students, three dimensions—social/people, extracurricular activities, and curriculum—had the most impact on the perceptions of school climate, and also therefore on student achievement.

There is a recognized correlation between school culture and student achievement (Demiroz, 2020; Goldring, 2002; Gruenert, 2005; MacNeil et al., 2009). Daniels and Steres (2011) showed that school culture's impact on student achievement is mediated by student motivation. Positive school culture encourages increased student motivation and engagement, which then leads to increased student achievement.

Research related to school buildings and their impact on school climate is relatively sparse. There are studies that focus on school safety (Rutter et al., 1979), noise (Clark et al., 2005), and cleanliness (Evans, 2004). The age of the building was generally not a factor identified by students, except in cases where the building was very old; in these cases, students demonstrated pride in the history of the school (Gruenert, 2005). However, we were unable to find any studies that related school appearance to student invitation and belonging. L'Esperance et al. (2001) link school culture to invitational theory but do not specifically refer to school buildings.

Beyond the impact of school climate on student achievement, however, Walls et al. (2021) state that a school climate that evokes caring by teachers and principals is essential for students' sense of belonging, which in turn promotes student engagement. Although this increased engagement results in better student achievement, it is also critical for students' social and emotional growth.

Student Engagement and Motivation

A well-known definition of engagement is "a positive and inspiring state of mind that is characterized by vigor, dedication, and absorption" (Ouweneel et al., 2013, p. 225). There are several components of engagement, the most common being behavioural, emotional or affective, and cognitive. Behavioural is the most observable component, but the least impactful on student achievement (Irvine, 2021). Cognitive engagement has the greatest impact on student achievement and thus is the most important component to influence (Conner & Pope, 2013).

Pope and Miles (2022) found that students' sense of belonging had the greatest impact on the cognitive component of engagement. This is consistent with one of the instructional strategies that supports sense of belonging—namely, structuring cognitively challenging lessons for students. This is also consistent with stage-environment fit theory that states teachers frequently do not ask students to use their developing cognitive skills through cognitively challenging questions and activities.

Reeve and Lee (2013) have proposed a fourth component of engagement: agentic engagement. This component reflects the active nature of engagement and includes subdimensions such as student advocacy, students posing questions, and expressing preferences and interests.

There is virtually unanimous agreement that student engagement is positively correlated with student achievement (Doyle Lynch et al., 2013; Pitzer & Skinner, 2017; Verhoeven et al.,

2021). As discussed in the section on students' sense of belonging, the latter is correlated with engagement, particularly cognitive engagement (Pope & Miles, 2022). Engagement is identified as a mediator variable for student achievement (Koller et al., 2001). This is consistent with the research on students' sense of belonging, which considers the impact of sense of belonging on student achievement to be mediated by engagement and motivation.

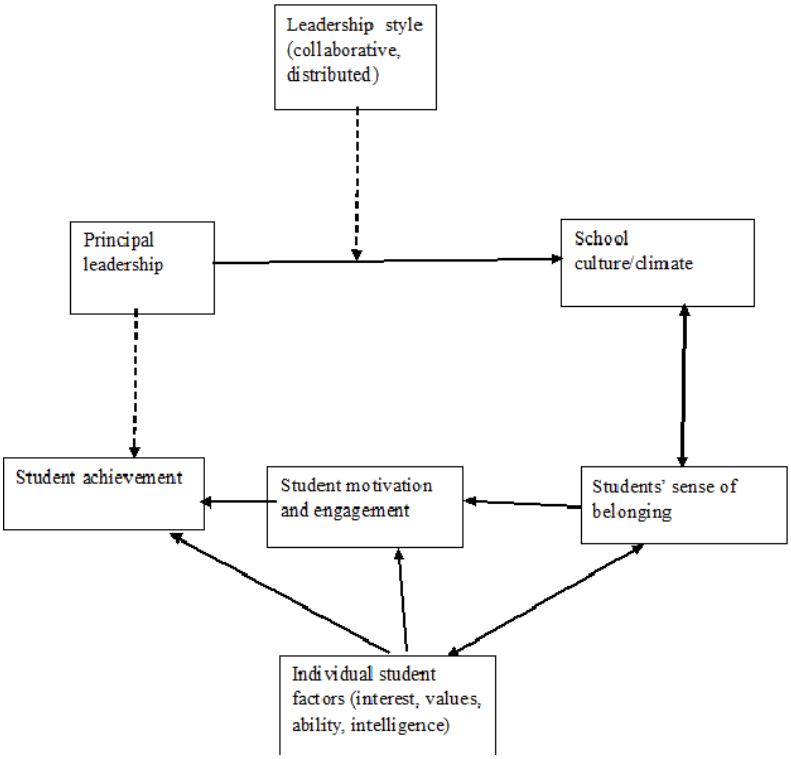
Principal Leadership Styles

The principal's main objective is to increase student achievement. This is done indirectly through the principal's impact on creating a positive school culture, which increases students' sense of belonging and in turn leads to increased student motivation and engagement, resulting in student achievement. Creating a positive school culture and managing the school have been identified as the two main roles a principal must perform (Zahed-Babelan et al., 2019). As Figure 2 illustrates, a positive school culture increases students' sense of belonging, which, mediated by the students' motivation and engagement, impacts student achievement.

The relationship between school culture/climate and students' sense of belonging is bidirectional, with a positive school climate positively influencing students' sense of belonging, and positive sense of belonging influencing school climate (Demiroz, 2020). The principal's success in creating a positive school culture is moderated by the principal's leadership style. A collaborative leadership style employing distributed leadership is most conducive to creating or increasing a positive school culture (Irvine, 2021, 2023; Zahed-Babelan et al., 2019). Sense of belonging, motivation, and achievement all are influenced also by individual student factors such as interest, ability, values, and intelligence (Demiroz, 2020).

Figure 2

Impact of Principal's Leadership on Student Achievement



Research Questions

1. How does establishing a school climate of belonging and engagement differ when faced with an existing school climate compared to opening a new school in which no established school climate exists?
2. What impact did student art projects have on students' feelings of belonging and students' engagement in the school community?
3. Were student art projects part of an overall plan to establish a school climate of belonging and engagement or were they stand-alone efforts?

Methodology and Method

This research employed a case study methodology (Gerring, 2007; Yin, 2009). Case 1 was an ex post facto study while Case 2 was examined in real time. For Case 1, semi-structured interviews were conducted with the principal (two interviews of at least 1 hour each) as well as seven teachers (one 1-hour group interview) who were on staff at the time of the student art

projects and were aware of the project's impact on students' sense of belonging and engagement.

For Case 2, semi-structured interviews were conducted with the principal (two interviews of at least 1 hour each), a 1-hour interview with the school's art teacher, and 45-minute interviews with four students who volunteered to discuss their artwork and the impact the art project had on their feelings of belonging and engagement in the school.

Written permission from parents was obtained prior to the students being interviewed. Everyone involved volunteered to be interviewed. All participants were anonymized including teachers and administrators. as were both school names, and all were given pseudonyms for purposes of this study.

The principals were asked to describe: the project and the impetus for sponsoring it; if the project was a stand-alone or part of a greater plan to engage students; the level of staff buy-in; the level of superintendent support; if there was an impact on community involvement in the school; and if increases in student engagement and involvement were observed. The students were asked to describe: their artwork and the reasons behind choosing their topics; the reactions to their art by parents and peers; if the students had become more involved in the school community because of the project; if their personal feelings of belonging to the school community had changed; and if they felt there should be more projects like the art project.

All interviews were recorded and transcribed. The interviews were then analyzed using content analysis (Krippendorff, 2013) to identify themes. The themes from the two case studies were then merged to identify commonalities and unique differences. Cross-case analysis (Khan & VanWynsberghe, 2008) was used to identify common themes between the two cases as well as to identify critical differences. Written permission to publish an pictures or images were obtained prior to publication.

Case 1: Allendale Elementary School

Allendale elementary school was built in an area of burgeoning growth on the former Allendale farm property, on the outskirts of a city of 500,000. The farm property would eventually support 10,000 houses, shopping and recreation facilities, and several schools. Allendale elementary school was on the same campus as Arkwright middle school, and beside a Catholic elementary school. Allendale opened with 800 students in Kindergarten to Grade 5. It grew to 1,200 students in its second year of operation and had a 14-room addition in its fourth year. The student population was approximately 50% Black and 50% South Asian, with a small number of Caucasian students. One in five students were enrolled in the English as a Second Language program; 10% of the students received special education support. The student population consisted of first- or second-generation immigrants, some of whom were refugees.

The principal, Mrs. Kaplan, was an experienced and award-winning administrator. A large number of staff came with her from her previous school, and so were familiar with her leadership style and philosophy. Mrs. Kaplan's leadership style was very collaborative. She believed strongly in distributed leadership and obtaining staff input. This resulted in excellent staff ownership of initiatives and extensive buy-in. Decisions on the school colours and the school mascot came from staff. The mascot, a red-tailed hawk, was chosen because when the area was still farmland, there were large numbers of red-tailed hawks in the area. This served to maintain some of the history of the area.

Mrs. Kaplan was very cognizant that the incoming students had already been in multiple schools and so felt no ownership or sense of belonging to school. She knew that multiple transitions were disruptive and even traumatic to the students as well as to their families. In anticipation that some parents would be hostile to yet another school transition for their children, Mrs. Kaplan hosted a meeting with parents in the school gymnasium prior to the school opening. She outlined some of the initiatives that she and her staff had planned to promote students' sense

of belonging in their new building. The tone of the parents changed from hostile to enthusiastic as they head about these promised activities for their children. The initiatives included an extensive extracurricular program of sports and clubs, as well as community-oriented programs such as family movie nights, and faith-based celebrations of Christmas, Eid, Diwali, and others.

While the school was under construction, Mrs. Kaplan specified that all the walls, especially in the halls and common areas, were to be painted white. Her philosophy was that the students and community would provide the colour moving forward. Fire regulations specified that only 20% of wall space could be used for bulletin boards; Mrs. Kaplan stated that that left 80% of the wall space for student artwork.

In the first year of the school, Mrs. Kaplan hired a local professional artist to complete two murals. The first mural was a red-tailed hawk on the walls of the gymnasium. The second mural was in the school entrance: a farm scene connecting the school to the history of the area, the Allendale farm. Mrs. Kaplan had earlier lobbied to name the school after the Allendale family who had worked the land for over a century. The Allendale family also attended the opening ceremonies of the school.

In her second year of the school, Mrs. Kaplan instituted the student art project with total support from her staff. Every student in the school participated. The professional artist was hired to work with the students and associate the hallway murals with specific art curriculum expectations for each grade level. Each grade level was assigned a portion of a hallway wall. Working with the professional artist, each grade level planned and executed their mural. Every student was assigned to paint a grid square in their grade's mural. One section of wall was designated for staff, including teachers, secretaries, custodians, administrators, the school superintendent, and the Allendale family (Figure 3).

Figure 3

The Staff and Community Mural

The Kindergarten classes painted four collages representing the four seasons (Figure 4). Students learned about the use of colour and contrast, which were expectations in the Art curriculum, and integrated their work with expectations involving learning about seasons.

Figure 4

Kindergarten Collages

Each student in Grade 1 worked on a butterfly in the large primary-grades mural (Figure 5). Their work integrated expectations in the Arts curriculum with expectations in the mathematics curriculum around symmetry and shapes. “The pride that they exhibited in the

accomplishment of their creative butterfly was evident in their smiles" (Grade 1 teacher).

Figure 5

Some of the Grade 1 Mural

Note. Photo intentionally blurred by author to anonymize students.

The Grade 2 mural (Figure 6) involved painting birds with curved lines representing movement, and continued the theme of symmetry with small houses.

Figure 6

Some of the Grade 2 Mural

The Grade 3 mural also involved symmetry and shapes, with students working collaboratively to produce houses in vivid colours.

Figure 7

Section of the Grade 3 Mural With Its Theme of Houses

A stairwell with a very wide landing where students performed drama skits was lined with a mural of faces painted by the Grade 4 classes (Figure 8). So, when student skits were presented in the stairwell, in addition to their classmates sitting on the steps, the performers had a sea of faces added to their audience.

> The symphony orchestra [stairway] mural allowed students to showcase their own individual diverse selves. Students painted their faces using paints that were their skin colour, which was culturally responsive. It was great to see the individuality in the details (e.g., students painted braids, patkas, etc. to show aspects of their personal diversity). Even to this day, students enjoy walking up the staircase, as they often see/feel representation in the mural. (Grade 4 teacher who is still at the school)

One of the teachers who was interviewed was also the parent of a son in Grade 4. She spoke about how proud he was to show her his painting. He asked her what was unique about his painted face, pointed out his uniqueness, and compared his face to his friends' and classmates' faces. His feelings of inclusiveness while still being his individual self were apparent.

Figure 8

Students Work on the Grade 4 Mural

Note. Photo intentionally blurred by author to anonymize students.

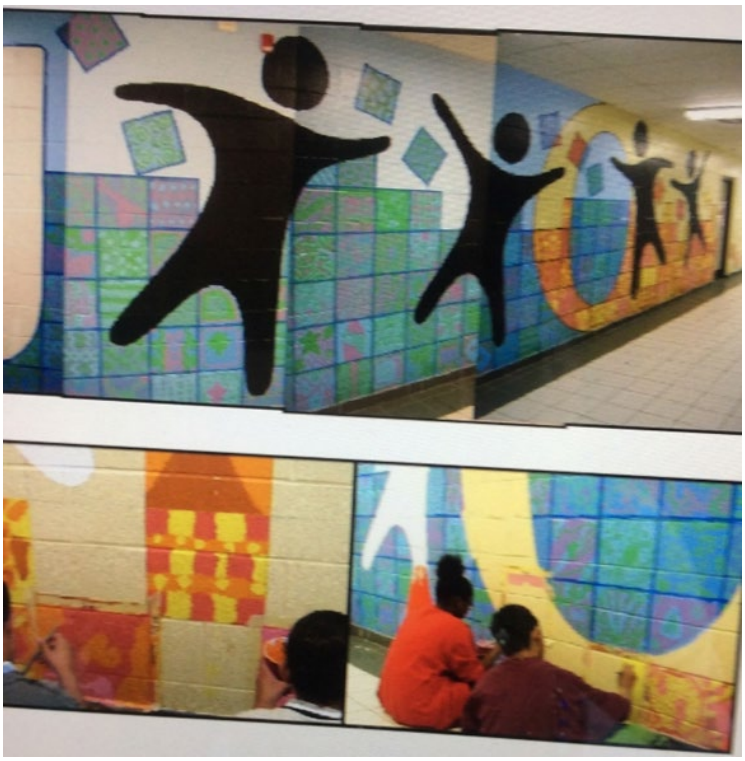
The Grade 5 mural was also a collaborative project. Each student designed and painted one grid square, receiving instructions from the professional artist on the elements of design—such as the use of colour, lines, and shapes—as well as painting techniques such as brush strokes and how to integrate various design elements. The theme of the Grade 5 mural was diversity, representing an overall school theme of diversity and inclusion (see Figure 9).

Once the murals were finished, parents were invited to come to the school to see their children's art. The bulletin boards in the hallways were also filled with students' work, which the children proudly pointed out to their parents.

A former music teacher commented that the wall murals raised the profile of the arts in the school, including visual arts, music, and athletics. She also identified the pride shown by the teachers in both their own art on the staff mural and the artwork of their students.

Figure 9

Grade 5 Mural With Its Theme of Diversity



The teachers unanimously felt that students learned cooperation and collaboration skills from working on the wall murals. They also felt an increased energy in the building and all the teachers commented on the increased sense of belonging and ownership that the students exhibited. A teacher who is still at the school commented that even though the mural art project was completed several years ago, former students return to proudly show off their work to parents and friends. To date, there has never been any defacement or grafitti on any of the murals. “I think that the whole mural project did a lot to bond the school as a community. When you are a newer school, nothing is more important than to make that a priority” (Grade 1 teacher).

Case 2: Fernwood Middle School

Fernwood Middle School is located in a mature area of a Southern Ontario city of 500,000 residents. The school of 492 students has maintained a relatively constant enrolment of approximately 500 students as newer families move into the area. Sixty percent of the student population were people of colour, 20% were recent immigrants, 10% were enrolled in English as

a second language programs, and 25% received special education support. The school building was several decades old, and was showing its age.

In his first year at Fernwood, the new principal, Mr. Young, had previously been principal in three other schools in the district. He had served as vice principal under Mrs. Kaplan (the principal in Case 1) and had seen the results of her collaborative and distributed leadership style.

Coming into a school with an established school culture, Mr. Young recognized that he needed to learn about the established culture before initiating changes (Zahed-Babelan et al., 2019). This can be difficult since facets of school culture may be written but also unwritten and simply understood as practice by the existing staff.

When he was told that as a part of routine maintenance, the halls and common areas of the school were to be repainted during the summer, he recognized an opportunity to promote a sense of belonging and student ownership among the student body. Promoting a climate of belonging was a district initiative, as well as a directive from the Ontario Ministry of Education (2024) to provide opportunities for racialized/marginalized students to see themselves reflected in their schools.

Mr. Young enlisted the school's art teacher to act as an advisor to the students, and several other staff members enthusiastically joined the project. Students were allowed to paint anything they chose, with the exception of sexual depictions or gang symbolism. The student response was overwhelmingly positive. Paint was provided by the school, and the walls soon changed from institutional green to a myriad of colours (Figures 10 and 11). Fortunately, this was an exception, as almost all the paintings were joyful expressions by the students.

Mr. Young purchased a QR code generator. Each student's painting had a QR code attached to it. Scanning the QR code connected to a written, audio, or video clip in which the student explained the origins of and the meaning of his or her painting. Mr. Young referred to this as integrating modern technology into the art curriculum.

After the paintings were completed, students took pride in bringing their parents to the school to show off their work. The colourful hallways became a showpiece for school visitors, school council members, and members of the community who visited the school.

The student painting project "took on a life of its own," with student artwork flowing into stairwells and other common areas. Clearly, the students were enthusiastic and engaged in the project. Strangely, the school superintendent was not pleased with the student painting project, and Mr. Young was told to discontinue the project.

Figure 10

Constructing the Wall Murals

Figure 11

A Sample of the Finished Wall

Mr. Young stated that the wall art was key to establishing a welcoming school climate, providing a variety of opportunities for students to feel more connected to their school and have their identities reflected in the school environment. In addition, there were workshops to show students how their identity is expressed through art, and parent tours of the murals. The student artwork was an integral part of the overall school philosophy; as Mr. Young put it, “Our approach to learning is that if the students identify and see the relevance behind what they are learning then they internalize the concepts.” There was some pushback, as more traditional staff members did not like the student art project, since they felt a school should be more of an institution.

One of the suggestions was to paint a self-portrait illustrating how the student felt about themselves. For one student, this led to an unexpected result. She painted her own face with her hands over her mouth, a clear cry for help. With probing from the school’s guidance counselor, a situation involving domestic abuse was uncovered and referred to professionals, like the school social worker.

Student Interviews

Gurjinder. Gurjinder and his family came to Canada from India one and a half years ago. Gurjinder is in Grade 7. His younger sister is in Grade 5 and will be coming to Fernwood next year. Gurjinder initially felt very isolated in the school and felt that it was difficult to make friends. He is very proud of his painting on the wall; he says that he has gained the respect of his peers through his art and that his art has led to new friendships within the school. He now feels much more connected to school life. He believes that the art project was a wonderful idea, replacing the institutional wall colours, which he found depressing, with vibrant colours; he called the colours in the wall murals warm and inviting. His painting of the solar system (Figure 12) is meant to symbolize the limitless opportunities he sees in his new home in Canada.

Figure 12

Gurjinder's Solar System of Opportunities

When Gurjinder first came to Fernwood he was not involved in any extracurricular activities. He has now joined the art club and is thinking about becoming involved in the Caribou Math Contests, since his favourite subjects are math and science. Gurjinder worked very hard on his wall art and stated that it took him 2 months to complete it. Gurjinder has proudly shown his work to his parents, and he stated that his art will be on the walls for 50 years. Gurjinder would really like to see more school projects like the wall art project

Caitlyn. Caitlyn is in Grade 8. She was born in Canada, however her family moved several times after she started school, so she has been in several different schools. She entered Fernwood in Grade 6. Caitlyn is a talented artist and has already been accepted to a school for the arts for Grade 9. Caitlyn was frustrated by her art teacher's advice and suggestions about her painting (Figure 13), which she saw as unnecessary interference.

Figure 13

Caitlyn's Art

Caitlyn wanted more autonomy to paint what she wanted without interference. Caitlyn says that she is “not a joiner” but she belongs to the art club and regularly contributes to the art wall in her art teacher’s classroom. She has not felt very connected to the school but feels very connected to the art program in class. She is proud of her art in the mural; her parents have seen her work and her peers have commented on the quality of her art. Caitlyn would like to see more art projects like the wall murals, and she hopes that next year at the school for the arts she will have more opportunities to create artwork that is displayed for everyone to see; Caitlyn wants more chances to display her competence and creativity in art.

Colin. Colin and his family emigrated from Sri Lanka 5 years ago. Now in Grade 8, he came to Fernwood in Grade 6. Colin’s wall art (Figure 14) is a coffee cup with a red eye on it. He said that the art has a double meaning: The red eye is looking out at everyone, while as a coffee lover, he drinks a “redeye” (a coffee with an extra shot of expresso) every morning. Colin claims to be a coffee connoisseur. He told us that Sri Lankan coffee is the best in the world.

Figure 14

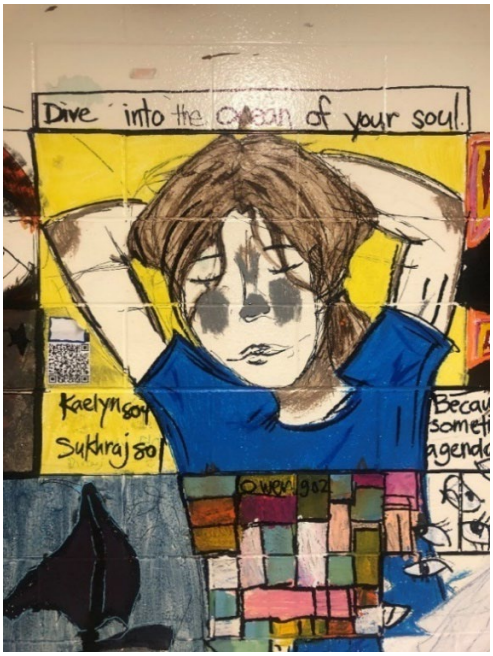
Colin’s “Redeye”

Colin participates in numerous extracurricular activities at Fernwood, including student council, art club, debate club, and assembly committee. Colin loved the art mural project; he has shown it to his parents and peers, and has received praise from his friends as well as other students with whom he has now become friends. He described the colourful walls as bringing joy and cheer to what was previously depressing institutional green corridors. He would like to see more projects like this one both here at Fernwood and hopefully next year when he goes on to high school. Colin feels that the energy in the school is much greater since the murals were painted.

Miriam. Miriam and her family emigrated from Syria 7 years ago, but the family moved a lot and she has only been at Fernwood for less than 1 year. Miriam is in Grade 7. Being new to the school, Miriam does not yet have a lot of friends among her peers. A thoughtful and quite introverted student, Miriam's art (Figure 15) represents for her a quite sophisticated philosophy typified by the inscription "Dive into the ocean of your soul" above her self-portrait.

Figure 15

Miriam's "Dive Into the Ocean of Your Soul"



Miriam was not previously in any extracurricular activities but has now joined the art club and is considering joining the debate club as well. Miriam's parents have not yet seen her art, but Miriam has received praise from her peers and is tentatively making some new friends. Miriam is cautiously looking forward to Grade 8 at Fernwood. She hopes that there will be more projects like the murals, which she said made her feel more like a part of the school.

Case 2 Summary

Mr. Young confirmed that the project was a success. Students often took their parents to see the artwork and an increased sense of pride and ownership by students, as noted by the staff. Mr. Young confirmed that the art project also increased community involvement in the school: "Parents loved it and would often come to the school and ask to see the art." School council members also requested tours of the halls when they arrived for school council meetings.

Mr. Young, who describes his leadership style as "servant leader," fought to keep the student artwork but was overruled. During the summer, the artwork got painted over and students were very disappointed when they returned to school in September. Mr. Young was not deterred by this setback, and initiated a new student art project consisting of murals designed by students and staff but the actual artwork will be done by artists approved by the district.

Discussion

There are similarities between the two student populations in this study. Many of the students were relatively new to Canada. They and their families may have faced hardships in their native countries or on their journeys to Canada. Once in Canada, students often moved numerous times and frequently changed schools, making it difficult for the students to form friendships or make connections with peers and teachers.

There were some similarities and some differences between the two schools in this study. One was an elementary school, in a very new area of the city. The other was a middle school, in

an established area of the city. The elementary school was new, and had more than twice the enrolment of the middle school, which was several decades old. In both cases, the principals were in their first year in that school, although both principals had experience in other schools. A significant difference was in school cultures. In Case 1, there was no established school culture, since it was a new school, and there was virtually 100% buy-in by staff for the art project. In Case 2, there was an established school culture, and relatively less buy-in by staff. Thus, the principal in Case 2 had to overcome some pushback, and had to modify an existing culture that was quite ingrained and resilient to change.

Case 1 presents an excellent example of intentionally inviting behaviours. All the actions taken by the principal were focused on making the school an inviting place, both for students and the community. Recognizing a need for stability and a warm and inviting milieu, the principal and her staff provided a broad range of activities and opportunities for students, and developed a comfort level for parents that their children would be cared for and have their needs met in a safe and welcoming environment. Students were given a wide range of choices for participation in extracurricular activities, and the teaching and learning environment encouraged student interest and engagement. The students worked diligently on their art, and lived up to the school motto, “my best, your best, our best.”

In Case 1, there was no established school culture. Through her collaborative leadership style, the principal was able to quickly foster a warm and welcoming school climate. This was aided by the number of staff who knew her and her leadership style from the previous school. The principal had formed a school senate consisting of an elected teacher representative from each grade. The senate met for 15 minutes every week; grade representatives brought forward ideas, concerns, and initiatives developed by the grade teams. The principal acted to facilitate

these initiatives and provide support and funding where necessary. As long as a sound rationale was given and the benefits to students were identified, the initiatives were usually adopted. This distributed leadership style served to generate staff ownership and buy-in.

The wide range of student choice satisfied SDT's need for autonomy. In addition, the need for relatedness was developed through participation with other students, fostering self-regulation, cooperation, and consideration of the needs of others. Students also were able to demonstrate competency in areas of their choice, including sports, clubs, and artistic activities.

Focusing now on the student art project, participation in the arts (visual arts, dance, music, drama) has been shown to foster many prosocial behaviours, including positive relationships with peers, improved classroom behaviours, enhanced emotional competency, less bullying, less competition, and increased self-reflection (Mak & Fancourt, 2021). Mak and Fancourt (2021) also found that arts participation is dependent on socio-economic factors, which did not apply in this situation since the entire school population was relatively homogenous economically. The student art project was an integral part of the principal's overall plan to generate school pride, students' sense of belonging, and student engagement while positioning the school as a community hub. Students became engaged in the art project and that engagement carried over into their schoolwork in other areas. Anyone entering the school would clearly see that, as the principal often stated, "the building is here for the students." The school quickly became a lighthouse school, as a haven for students who may have previously been uncomfortable with their new surroundings. The enhanced students' sense of belonging resulted in increased motivation and engagement in both curricular and extracurricular school activities.

In Case 2, several themes surfaced during content analysis. First, the school hallways' original paint was identified as institutional, dull, and depressing—an unintentionally disinviting

milieu. After the student artwork was applied to the walls, students identified it as cheerful, joyful, and inviting. The principal reinforced that the school hallways were now intentionally inviting to students, parents, teachers, and the community. Many students particularly commented on the QR codes, which they saw as connecting to their technological lives outside of school.

A second theme was the reinforcement of SDT. Three of the four students interviewed spoke of more positive relationships with peers, making new friends, and feeling greater self-esteem due to their artwork. The fourth student, Caitlyn, had feelings of frustration when she felt a lack of autonomy due to the art teacher's restrictions on her work. While well-meaning, since he recognized Caitlyn's talent as an artist, his suggestions and recommendations resulted in Caitlyn's frustration. This reflects both SDT's need for autonomy as well as stage-environment fit theory's tenets on growing adolescents' needs for autonomy, decision-making, and cognitive challenge.

The student art project was one aspect of the principal's initiative to increase students' sense of belonging and ownership in their building. However, without the support of his superintendent, the student artwork was destroyed, with a concomitant decline in students' pride of ownership in their school.

Overall Themes

This study reinforced the role of collaborative leadership in creating a positive school culture. Both Mrs. Kaplan and Mr. Young employed collaborative and distributed leadership to move their schools into a more inviting stance for students, teachers, and the community at large.

The study reflected the key role of a school being intentionally inviting, particularly for students but also for any stakeholder who entered the building. This inviting stance enhanced a positive school climate, which resulted in increasing students' sense of belonging. This increased sense of belonging grew students' motivation and engagement in their learning and their environment, which research has shown to enhance student achievement.

The two art projects differed in that in Case 1 there were overall themes, while in Case 2, students were free to create whatever artwork they chose, so the finished product had no theme (Figure 16). However, student autonomy can be considered a theme in Case 2, reflecting stage-environment fit theory for that age group.

Figure 16

Autonomous Artwork in Case 2

In both case studies, the hallway murals were a part of an overall plan to promote students' sense of belonging and engagement. There were multiple other initiatives enacted by the principals and their staffs. The hallway murals were one visible part of the principals' philosophy to make the schools intentionally inviting to students, parents, staff, and the community. The situation in Case 2 was disappointing in that district personnel outside the school forced the removal of the student art, which negatively impacted student belonging.

Diana Laufenberg, executive director of Inquiry Schools, identifies five requirements to sustain school change: permission, support, community engagement, accountability, and staying the course (as cited in Schwartz, 2018, para. 2). She states that a 3 to 5-year timeline is necessary to evaluate the success of a change.

Permission

The principal in Case 1 had the implied permission of her superintendent, while the principal in Case 2 inexplicably was refused permission by his superintendent, but proceeded anyway because he perceived a significant need in his school. Sadly, this resulted in the students' artwork being destroyed, with a consequence of students feeling disillusioned and disaffected; this was the opposite of the intention to make the school more intentionally inviting to the students.

Support

Both principals had the support of their staffs, although in Case 1 support was overwhelming. In Case 2, only some staff were involved, while other more traditional teachers were opposed to the project.

Community Engagement

In both cases, there was a great deal of community engagement, as parents came to the schools to see the artwork proudly displayed by their children. In Case 1 there was also community involvement in some of the murals, with the staff and community portion of the mural actually created by community members.

Accountability

In Case 1, the principal assumed accountability from her staff due to overwhelming buy-in; in Case 2, the principal accepted accountability for continuing the project after explicitly being told to stop by his superintendent. This had negative consequences for some students, as outlined above.

Stay the Course

Stay the course was evident in Case 1; the school and its many initiatives became a lighthouse school in the district. In Case 2, despite the setback, the principal was undeterred and has initiated another, somewhat similar project, the outcome of which is not yet known.

Conclusion

This study contrasted the impact of staff buy-in. In Case 1, there was 100% buy-in from the staff. This was due to several factors: there was no existing school climate that required change, since the school was new; the principal's collaborative leadership style invited staff participation and partnerships; and most of the staff came from the school where the principal had previously worked, and so shared her vision for the new school.

In Case 2, the new principal had to modify an existing school culture. While many staff bought into the hallway art project, there were some staff who disagreed with the project and wanted the status quo to remain unchanged. This is consistent with research that indicates a new leader must become familiar with existing school culture before initiating change (Zahed-Baleban et al., 2018).

In both cases, this paper illustrates the role of self-determination theory, stage-environment fit theory, and most importantly, invitational theory in creating a school climate that encourages students' sense of belonging and engagement in their own learning.

The study identified the important role of school belonging in increasing student engagement as well as student self-confidence and self-esteem. These are major dimensions of student development as well as supporting student achievement. Both principals recognized the importance of these affective dimensions and, as a consequence, students at both schools benefited from this visionary leadership. There is a need for more educational leaders to recognize and implement initiatives that support student affective dimensions, both because of their impact on student achievement but also the impact on student well-being and personal growth.

There is also the need to recognize the significant role that school culture plays in fostering successful initiatives to support student growth. Overcoming or modifying an

established school culture can be a daunting task. Educational leaders must recognize the need to foster staff buy-in, by demonstrating the efficacy of such initiatives in shaping student behaviours and well-being. Significant staff buy-in will result in much more effective initiatives, as well as supporting student and staff well-being.

Finally, this study addressed a literature gap, identifying the role of physical environment as an important factor in building a positive school climate. Previous research considered only factors such as safety, cleanliness, and noise level, while this study identified the need for an intentionally inviting school physical environment to address students' affective and emotional stances towards their own education and psychological well-being.

Limitations

As always with case study analysis, generalizability may be limited. However, the importance of a school culture that supports and encourages student belonging is clear. In this study, Case 1 was an ex post facto study. This may limit the veracity of memories and may be enhanced by the "rose coloured glasses" effect, where events and results may be positively biased as people tend to have fonder memories than may have actually occurred. Case 2, which was a real time analysis, was not affected by this bias. However, in Case 2, since all student interviewees were volunteers, results may have been upwardly biased since volunteers tend to be those students who felt they had benefited from the project.

The literature on school belonging is clear that increased feelings of belonging correlate to increased student achievement as well as other positive affective dimensions of student well-being. These student art projects represent one way to increase students' sense of belonging, as well as increasing community involvement and pride in their schools. There are of course many other ways to address these issues, but the student art projects are a straightforward and relatively

simple method of achieving significant gains in belonging with relatively little expenditure of time and resources.

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