An exploration of the relationship between student experiences in the school environment and school belonging

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AN EXPLORATION OF THE RELATIONSHIP BETWEEN STUDENT EXPERIENCES IN THE SCHOOL ENVIRONMENT AND SCHOOL BELONGING

An Abstract of a Thesis

Submitted

in Partial Fulfillment

of the Requirements for the Degree

Education Specialist

Erin E. Welsh

University of Northern Iowa

December, 2009
ABSTRACT

Researchers have worked for years to decrease rates of student dropout by identifying associated factors, and developing strategies to increase school success. Despite these efforts, dropout is a complicated phenomenon, making it difficult to effectively support students. There is a body of literature concerning the connection between students' sense of belonging and its relationship to dropout. This literature is reviewed in light of the effect teachers, parents, peers, and personal characteristics have on belonging and dropout. A second body of research concerning how the physical environment of schools as behavior settings affects student outcomes is also discussed. A survey was conducted with high school students to explore how these two domains can be brought together to explain student belonging and high school dropout. The research questions included (1) what factors contribute to students' feelings of connectedness and belonging to their school? (2) how does the school's social and physical environment influence students' sense of belonging?
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Erin E. Welsh
University of Northern Iowa
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Entitled: *An Exploration of the Relationship Between Student Experiences in the School Environment and School Belonging*

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CHAPTER 1
INTRODUCTION

According to the National Center for Education Statistics, in 2004 10.3% of students in the United States dropped out of school without receiving their high school diploma (Laird, DeBell, & Chapman, 2006). Students who do not graduate from high school are at a great disadvantage—they face substantially higher unemployment rates, lower lifelong earnings, higher incidence of criminal activity, and a greater likelihood of health problems than students who complete high school or go on to college (Croninger & Lee, 2001). Schools, educators, and researchers continue to seek a better understanding of why many students dropout and what can be done to reduce the occurrence. Historically, much of the research on dropout has focused on internal characteristics of students and their deficits, but now more is being done to determine what educators can to do support student success (Lehr, Hansen, Sinclair, & Christenson, 2003).

The literature on dropout indicates that a sense of belonging in school is an important part of why many students drop out (Certo, Cauley, & Chafin, 2003; Goodenow, 1993; Osterman, 2000). Along with this, there is a separate body of research focusing on how the configuration and physical condition of spaces within and immediately outside of school buildings impact student learning (Astor, Meyer, & Behre, 1999; Branham, 2004; Conners, 1983; Maxwell, 2003; Schoggen, 1989; Sommer, 1977). The current study sought to bring these two areas of research together and investigate whether students’ sense of belonging in school is related to their awareness and
perceptions of the physical school environment. Thus the research questions included (1) what factors contribute to students’ feelings of connectedness and belonging to their school? (2) how does the school’s social and physical environment influence students’ sense of belonging? The long-term goal in linking these two areas is to develop more timely and appropriate dropout interventions in schools, in hopes of helping more students experience success (Gulwadi & Knesting, 2007; Knesting & Gulwadi, 2007).

**Limitations**

The primary limitation of this study was a small sample size, which makes it impossible to generalize the information gathered. The researcher made numerous attempts to gain informed consent and increase participation from students, but the response was low. Perhaps if the researcher had more time with students to increase buy-in, better incentives for students, or a better process for obtaining consent, the number of participants would have been greater.

**Definitions**

The term “dropout” will be used to describe students who do not complete high school. These are students who do not graduate and leave school before completing the required curriculum, and therefore do not receive their high school diploma. There is currently debate among educators, administrators, and legislators about how dropout rates are calculated (Stanley, Spradlin, & Plucker, 2008), but for the purpose of this paper the calculation method is not a central focus. Discussion will focus on students who are at-risk of dropping out, or who already have dropped out of school. Therefore, the term will
be used simply to refer to students who do not complete high school and exit before receiving their high school diploma.

The term “belonging” can be used to describe how welcome and accepted a student feels in an environment. Goodenow (1993) defines students’ sense of belonging as “the extent to which they feel personally, accepted, included, and encouraged by others in the academic classroom setting and of feeling oneself to be an important part of the life and activity of the class” (p. 25). Feelings of connection and relatedness at school are synonymous with belonging. The term helps explain the all-encompassing feeling that a student is a valued member of a group or setting. A variety of interrelated factors make up belonging, and multiple components help explain the feelings associated with a sense of belonging.

Theoretical Framework

Schools as Behavior Settings

Various factors such as relationships with teachers, parents, peers, and self have been linked to belonging, and belonging is related to dropping out of school. In the next section, a separate body of research will be tied to belonging. Brofenbrenner’s ecological theory, Barker’s theory of behavior settings, and research on the influential role of the school environment will be used to explore how the physical and social environments are linked, and support and/or inhibit students’ sense of belonging as well.

Bronfenbrenner’s Ecological Theory

The literature on belonging supports the idea that overlapping contexts and relationships in a child’s life are important to feelings of connectedness at school
Urie Bronfenbrenner's (1979) ecological theory proposes a system of overlapping spheres of influence and hypothesizes that these spheres of influence can be placed into ecological contexts. In his theory, a child is at the center of development and like a ring of water ripples surrounding a rock thrown in water, the child's development is surrounded and affected by these spheres of influence.

The sphere closest to the child, the microsystem, involves interactions between people on a day-to-day basis, such as family, neighbors, and community. The next sphere, the mesosystem, is two microsystems in interaction. For example, a child's parent and a child's brother are microsystems. The mesosystem, then, is interactions between a child's parent and a child's brother. The next sphere, the exosystem, is composed of linkages between microsystems, at least one of which does not directly affect the child. For example, a child's parent and their relationship with their boss at work, because the boss's actions may affect the parent and the overall affect may be on the child, even though the child is not directly involved with the boss. The last layer, the macrosystem, is all-encompassing, and is made up of things like cultural beliefs and values, customs, and legislation and their affect on the child (Bronfenbrenner, 1979).

The literature on belonging proposes that overlapping contexts and relationships in students' lives affect their sense of connectedness with school (Goodenow, 1993). This is related to Bronfenbrenner's theory, as a child's environment is made up of a collaborative network of experiences that do not function independently from one another. In this view, child development does not happen in a vacuum, but it happens everywhere children are—everything contributes to a child's development in some way.
In this view, not only does the social environment influence belonging, but the physical environment as well. Sommer (1977) makes this connection when he states, “The physical and social systems of the classroom are inextricably twined” (p. 175). The design and physical aspects of a school may affect belonging along with the social behaviors. However, there is not much literature to support this connection between school design and behavior.

**Barker’s Theory**

Support for the idea that physical and social environments influence belonging can be furthered by Roger Barker’s theory of behavior settings. A behavior setting “consists of one or more *standing patterns of behavior-and-milieu*” (Schoggen, 1989, p. 30), where the milieu (physical and geographical aspects of the setting) encompasses the behavior and has a standard structure. A standing pattern of behavior is an identifiable behavior that regularly occurs in a specific setting and that has a relationship to, or serves a purpose in, that setting. In addition, a standing pattern of behavior is not unique to an individual but rather occurs in a given setting regardless of who is participating. To illustrate this, Schoggen uses the example of a high school basketball game:

> For example, several standing patterns of behavior – such as the game playing of the team members, the refereeing of the officials, the time-keeping of the timekeepers, the leading of the crowd in cheers by the cheerleaders, and the sitting, standing, and cheering of the spectators – together with other standing patterns make up the integrated complex of behavior patterns that identify the setting (p. 30)

A standing pattern of behavior is connected to a milieu or one or more aspects of the physical setting (both manmade – i.e., buildings, objects, parking lots and natural – i.e., beach, mountain, grass). It is not performed separate from these and “exists
independently of the standing patterns of behavior and independently of anyone’s perception of the setting” (p. 32).

Summary

Researchers have worked for years to decrease rates of student dropout by identifying associated factors, and developing strategies to increase school success. Despite these efforts, dropout is a complicated phenomenon, making it difficult to effectively support students. The literature on student belonging was reviewed in light of the effect teachers, parents, peers, and personal characteristics have on belonging and dropout. A second body of research concerning how the physical environment of schools as behavior settings affects student outcomes was also reviewed. A survey was conducted with high school students to explore how these two domains can be brought together to explain student belonging and high school dropout. The primary limitation was a limited sample size.
CHAPTER 2
LITERATURE REVIEW

This chapter addresses research on the experience of students in schools related to belonging and dropout, as well as influences of the school environment on students' experiences in school. A review of the literature on student belonging will be followed by a review of what is known about the influence of physical environment at school on students. The discussion will be based on schools as behavior settings, and the importance of the ecological environment. This chapter will end with suggestions for how research results in these two areas may be brought together under one cohesive theoretical framework.

Student Belonging

The relationship between high school dropout and students' sense of belonging at school has received significant attention from researchers. Goodenow (1993) defines students' sense of belonging as "the extent to which they feel personally accepted, included, and encouraged by others in the academic classroom setting and of feeling oneself to be an important part of the life and activity of the class" (p. 80). It is a multi-dimensional construct in which multiple components are present such as relationships with educators, parents, and peers and the cumulative experience of them interacting. A variety of interrelated factors that will be addressed below help explain belonging, making it difficult to isolate any one part of any individual student's experience.

The following review of literature discusses what is known about the relationship between school success and a student's sense of belonging. There is a look at relevant
variables, such as the influence of educators (Bost & Riccomini, 2006; Certo et al., 2003; Croninger & Lee, 2001; Dunn, Chambers, & Rabren, 2004; Kortering & Braziel, 2002), parents (Demaray, Malecki, Davidson, Hodgson, & Rebus, 2005), peers (Certo et al., 2003; Demaray et al., 2005; Kortering & Braziel, 2002; Reschly & Christenson, 2006), and student characteristics (Alexander, Entwisle, & Kabbani, 2001; Caraway, Tucker, Reinke, & Hall, 2003; Kemp, 2006; Kortering & Braziel, 1999), all of which contribute to a sense of belonging in school. These characteristics cannot be thought of as separate parts of student lives, however, and it should be noted that the interrelations among these aspects are often intertwined and difficult to account for separately.

Educators

Several studies have reported on the importance of educators in the lives of students. Educators have influence over curriculum and teaching practices, and have the opportunity to build solid relationships with their students— which can foster a sense of belonging for students. Dunn, Chambers, and Rabren (2004) examined predictive factors of dropout among high school students. Of the students in their study who dropped out, 23% did not identify a helpful person during high school, while among the students who did not dropout only 8% did not identify a helpful person. Students who feel a bond with educators are more likely to be successful in school, and less likely to dropout (Certo et al., 2003; Croninger & Lee, 2001; Kortering & Braziel, 2002)

Another important aspect relevant to educators as identified by students is a lack of effective instruction. Kortering and Braziel (2002) interviewed students who had dropped out who said they would have been more likely to have stayed if teachers had
responded to their desire for more individual help, there were changes made to rules and classes, and changes were made regarding teacher attitude and behavior, including “less yelling” and “being nicer to students” (p. 184). Bost and Riccomini (2006) reviewed the dropout literature and reported that students often express wanting more relevant courses and less boring and irrelevant content, better planning and delivering of instruction, and better teacher attitude and behavior toward learning and material. It is important that students receive the proper individualized attention from educators and that they experience the positive interactions with them as well.

Certo et al. (2003) explored students’ level of belonging and engagement in school by interviewing 33 high school students in Richmond, Virginia. They were interested in the students’ perspectives of instruction, teachers, friends, and activities in their school. The students reported more engagement when instructional programming included authentic learning experiences, teachers provided challenging activities and showed interest in student learning, and the school day supported intrapersonal relationships with peers and adults. These findings further support the general idea that school personnel should attend to the quality of student learning and focus on the importance of student-teacher relationships.

It is important that teachers are aware of the importance of their role and believe that they have an influence on the lives of their students (Reese, 2007). Administrators, guidance counselors, teacher aides, coaches, clerical workers, or even custodial staff may provide students with advice, guidance, and support as well, but teachers often form the most important relationships with students (Croninger & Lee, 2001). Teachers must
believe that the content of what they teach, and how they teach students is vital to students’ future, including graduation and life beyond high school (Alderman, 2004). However, many teachers lack this belief or sense of teacher efficacy, defined as the extent to which they believe they have the ability to affect student performance (Alderman, 2004).

The attitudes and efforts of principals, teachers, support staff, and other adults in schools can have lasting effects on outcomes for students. Research results recommend that teachers and other adults should work to build solid relationships with students and to use effective teaching practices. Students identify teacher relationships as important to their reason for dropout and success in school (Knesting & Waldron, 2006), so an increase in these behaviors may help increase students’ sense of belonging and academic success. The variables associated with teachers and educators are part of why students may decide to dropout, but there are other factors involved as well, such as parenting and early life experiences.

Parenting and Early Life Experiences

Some research supports the viewpoint that dropout is not an event, or momentary action, but instead a longitudinal process that develops over time (Alexander et al., 2001; Demaray et al., 2005; Jimerson, Anderson & Whipple, 2002; Jimerson, Egeland, Sroufe, & Carlson, 2000). In this view, a culmination of life events influence one another to form a child’s present, and these experiences combine to affect school success.

For example, Jimerson et al. (2000) conducted a 19-year longitudinal study of at-risk children to explore multiple predictors of high school dropout. Participants included
177 at-risk children and their families. Assessments were conducted at four data points: birth to one-year, six years, sixteen years, and nineteen years. These assessments looked at family factors in early development, such as quality of care-giving, maternal sensitivity, infant-mother attachment, problem-solving support, socioeconomic status, and parent involvement. They also assessed the children periodically with the Wechsler Intelligence Scale for Children-Revised, the Child Behavior Checklist, peer competence scales and the Woodcock-Johnson Achievement Test-Revised. The results of the study demonstrated that the association of the early home environment, the quality of care-giving, socioeconomic status, and parent involvement had an affect on student dropout. These findings suggest that school success is affected by early life experiences and is part of a process that begins even before children enter elementary school.

Other researchers have studied the effects of engagement and belonging as developmental processes as well. Alexander et al. (2001) studied high school dropout as a long-term process of disengagement from school. The students in the study were part of the Beginning School Study (BSS) in Baltimore, Maryland, a long-term panel study monitoring the educational and life progress of a representative sample of Baltimore children since fall 1982, when the members of the study group were beginning first grade in 20 of the cities public schools. Children were assessed at four schooling benchmarks including early elementary, late elementary, middle school, and early high school. Academic, parental, and personal resources or conditions were assessed as well as socio-demographics. The researchers found that attachment and engagement in school developed over time as part of a student's cumulative experience. This suggests that
whether a student feels a sense of belonging at school or not is part of a developmental process that happens over a series of years and experiences.

Parental support is also considered to be an important part of this process. Parents can be a crucial factor in the early adolescent years by providing support to their children in various ways such as personal adjustment issues, coping with school difficulties, and supporting a sense of belonging at school (Demaray et al., 2005). It is important for parents to have a connection with their children and to encourage their relationships at school. Parents are a form of support for children, and can help them manage difficulties experienced at school. The student relationship with parents can help children build a strong sense of belonging at school by providing them with a form of support at home throughout their childhood development (Demaray et al., 2005).

Researchers suggest that a sense of belonging may be built over time. Some research supports a life-course view which explains disengagement from school as a long-term process. Experiences in young childhood, such as parental support and a sense of belongingness in school, may evolve over a lengthy period and affect the eventual decision to dropout of school. This means that early experiences at home and school are important to the sense of belonging and success experienced in school.

Peers

Student relationships with peers are an important part of student belonging, and students who find it more difficult to form strong bonds with peers are more likely to have negative school experiences (Certo et al., 2003; Demaray et al., 2005; Kortering & Braziel, 2002). When Certo et al. (2003) interviewed high school students about their
school experiences, they described the importance of peer relationships as related to belonging. It was important for these students to have a small group of friends to connect with and it was considered a negative experience to be in a hall, class, or room where there were no friends. To these students, friendships were an integral part of their schooling, and many expressed that it was what they looked forward to the most at school. The researchers concluded that the students felt a strong sense of belonging when they had opportunities to socialize with friends, such as at lunch time or between classes (p. 716).

Reschly and Christenson (2006) also described peer relationships as part of engagement. They analyzed the National Educational Longitudinal Study (NELS) to show that students with learning and behavior disorders report less engagement with their peers, and engagement variables were significant predictors of school dropout for these students. Thus, students’ relationships with peers affect their sense of belonging, and also affect their decision to dropout of school.

Relationships that students build with significant individuals in their lives play an important part in the sense of belonging in schools. Relationships with peers also help students feel bonded in schools, and prevent them from wanting to dropout. Also, quality relationships and support built with others, such as educators and parents can help with feelings of connectedness at school. In the next section, literature on students’ personal characteristics, which are associated with belongingness and success in school, will be explored.
Student Characteristics

Some researchers are interested in whether students actually dropout or are forced out of schools. Often, when a student decides to dropout, many related factors affect the decision, and many of the factors are not in the student’s direct control. Rumberger and Thomas (2000) discuss whether dropping out is either a “voluntary” or “involuntary” decision. They suggest that accountability over student test scores and difficulty dealing with high-risk students actually causes educators and administrators to force students out of school. In this view, it is easier for educators to neglect students who require extra time and effort or who may bring down standardized test scores than to take the proper actions to help them succeed. Because of this, it is hard to determine whether students ever choose to dropout, or if circumstances become adverse enough for them to be forced into the decision.

Students do often take responsibility over the ability to control their own attitude and effort toward school and their lives, however. It is up to them to make the final decision to dropout, and perhaps change in their own attitudes and viewpoint on school and the world affects this decision. Kortering and Braziel (1999) found that students in their study who had dropped out reported that dropping could have been avoided if they would have had a different attitude and given more effort in school. These students were also asked if there were changes that could be made to get them to go back to school, and they identified that a change in their own attitude could help them decide to go back to school. These students were willing to take responsibility for personal change, and to take ownership of their decision to dropout.
Many of the personal characteristics of students associated with unhappiness at school are also closely related to a lack of belonging. Student attendance (Kemp, 2006; Kortering & Braziel, 1999; Rumberger & Thomas, 2000), academic achievement (Alexander et al., 2001; Battin-Pearson et al., 2000; Kortering & Braziel, 2002), and self-efficacy (Caraway et al., 2003) are all related to belonging and dropout. These characteristics are related to one another, and to belonging. Current research is unable to determine what happens first, or exactly how they affect one another, but several studies address these relationships.

Based on analysis of data from the NELS High School Effectiveness Study, Rumberger and Thomas (2000) discuss the relationship between student engagement and school attendance, and the effect that school attendance has on dropout. They report that students who do not feel a sense of belonging at school are less likely to want to attend school, which also puts them at-risk for dropping out. Rumberger and Thomas also report on the relationship between poor school attendance and academic failure, as students who do not attend school regularly are less likely to be successful academically. Students who struggle to achieve academically are often those who do not attend school regularly, both of which are related to a sense of belonging and potential for dropout (Alexander et al., 2001; Battin-Pearson et al., 2000; Kortering & Braziel, 2002).

Grade retention and student self-esteem characteristics are also related to belonging. Grade retention is one of the most powerful predictors of dropout, which also has multiple effects on students who repeat the same grade (Jimerson et al., 2002). Students who are retained struggle with other important factors that are related to
belonging such as self-efficacy, peer relationships, and engagement (Jimerson et al., 2002). When a student repeats the same grade, they may lose confidence in their academic abilities while also finding it more difficult to form solid peer relations—both of which are related to a sense of belonging. Caraway et al. (2003) studied self-efficacy, goal-orientations, and fear of failure as predictors of school engagement in high school students. Students who had higher self-efficacy and a goal orientation also had a stronger sense of engagement in school. Students who were confident in their academic abilities felt more connected to their school, and were more likely to be successful in school.

The personal aspects involved with dropout are particularly difficult to draw conclusions about. At what point can it be determined that a student is not trying and maintaining a bad attitude, and at what point have conditions at school become so adverse that the student no longer really chooses to dropout? This is a difficult distinction to make, however, it is also clear that students do have the choice to control their attitude and behavior to a varying degree, and those choices made concerning attitude, academic achievement and absences from school are related to belonging and dropout.

**The Relationship Between Physical Environments and Education**

Studies suggest a link between the physical environment of schools and student learning and academic success. Several studies have focused on how the physical setting of a school can influence student functioning. There is research that suggests that the physical environment can influence student participation and behavior in the classroom (Maxwell, 2003; Sommer, 1977), as well as academic performance (Maxwell, 2003).
The physical environment of schools is also correlated with student and teacher stress levels (Conners, 1983), student ownership (Killeen, Evans, & Danko, 2003), student attendance (Branham, 2004) and school violence (Astor et al., 1999).

Maxwell (2003) studied the effect of classroom density on elementary school students. Unlike other researchers who have studied overcrowding, Maxwell did not focus on the number of students in a classroom, but rather looked at density—square footage per child. In doing so, she was interested in how much space per child there was, rather than how many total students there were in a school. This approach takes into account the size of space relative to how many students are within it. Therefore, a student could still be in a high density classroom even if the total attendance of the school is rather small.

In the study, Maxwell was interested in how classroom density affects student learning and behavior, along with its psychological effects on students. Seventy-three second and fourth grade children in urban public schools were assessed on measures of achievement, social-behavioral disturbance, and self-reported psychological stress, which was compared to student density, or the ratio between number of people and the size of the space. Results indicated that girls’ academic achievement and boys’ classroom behavior was negatively affected by space conditions. This suggests that limits to physical space per student may have an affect on student learning as well as on student behavior.

Physical space and surroundings in schools was also studied by Astor et al. (1999). Their study of school violence involved looking at violence in relation to
physical environments and locations where violence happened. They were interested in asking students and teachers where violence occurred, and if there were patterns based on the physical locations. They surveyed and interviewed students and teachers at five different ethnically and economically diverse Midwestern high schools to learn about violence and its locations in their schools. Students (N= 78) and teachers (N=22) at the five high schools were given maps of their school and asked to identify dangerous areas in and around their buildings. Focus group interviews also were conducted with students to discuss violence in their schools. Teachers met individually with researchers for one-on-one interviews.

Results suggested that the social and psychological dynamics of physical locations effect school violence. Astor et al. (1999) found that violent events tended to occur in areas such as hallways, dining areas, and parking lots at times when adults were not typically present. Students were aware of locations that were associated with violence, and that violent acts occurred when teachers were not in close proximity. Other students expressed concerns over teachers’ reluctance to intervene in violent events outside the classroom. It is important to note that the interview data indicated that these territories within the school tended to be “unowned”—places unclaimed by or associated with any particular person(s) or group. Not only did violence tend to occur in places with less supervision, but also in places with no real association to anyone, any group, or anything. This suggests that perhaps students are influenced by the physical spaces and the social and psychological dynamics of them. The researchers noted that educators
should be aware of locations prone to violence and spend time supervising them and claiming ownership of them.

Other researchers have addressed similar issues of physical space. Conners (1983) discussed the literature on the links between student stress and the school environment. He described stress as the result of a mismatch between student needs and the environment. This mismatch can be related to the overall design of the physical environment, including both the macro (whole school) and micro (classroom) environments. He describes the macro environment as the whole school, including places where social interactions occur if there is enough space and time for them. When students feel that time is too rushed during passing or they are too crowded to interact they may experience stress. There is also research on what he terms “wayfinding” or the students’ ability to navigate the school. It suggests that stress is associated with students’ inability to find their way in their school building. In the macro or the micro environments Conners talks about how classroom arrangement, density, and privacy also affect student stress levels. This is consistent with Maxwell’s (2003) finding that density is related to students’ success.

Another important study by Killeen, Evans, and Danko (2003) involved the relationship between displays of student artwork in schools and students’ sense of ownership in their school. They surveyed 4th and 5th grade students at two schools—one with many permanent displays of student artwork, and one with no permanent displays of student artwork. Students in both schools filled out a scale which measured their individual sense of ownership in their school. Results suggested that students who attend
schools with permanently displayed artwork have a greater sense of ownership in their school than students who attend schools without permanently displayed artwork.

The results of Killeen, Evans and Danko’s (2003) study are relevant to the currently proposed research, because the definition of ownership used is similar to belonging as defined in the current study. Killeen, Evans, and Danko (2003) define ownership as, “the student’s development of a sense of connectedness, active involvement, and personal investment in the learning process.” It is similar to belonging, as involvement in school activities, relationships with teachers and peers, and academic success are described as making up ownership. This helps to support the idea that belonging may also be related to school design and the physical environment in the same way ownership was found to be.

The last, and perhaps most significant study on physical environments and students’ school experiences, was conducted by Branham (2004). He focused on the effect of school structure and condition on student attendance and dropout rates. Data were collected from 226 schools in the Houston area regarding need for structural repair, amount of square footage janitorial staff is in charge of, student overcrowding, student enrollment, and the economic status of students attending each school. Students were less likely to attend schools and more likely to dropout of those schools in need of structural repair, schools that used temporary classroom structures, and schools that had understaffed janitorial services.

The results of Branham’s study are of importance because they indicate that school infrastructure may affect student attendance and student learning. The physical
appearance, cleanliness, and allocation of space may be influential factors on student attendance as well as dropout rates. The study suggests that schools that are not well kept or are falling apart are not conducive to student success. Along with this, schools that are overcrowded and use temporary structures should also try to find solutions to building inadequacies and improve on the physical appearance of their school structures. The results of this study suggest a relationship between the physical environment and student learning and behavior. These findings may be interpreted to mean that the physical space within and directly outside of the school may affect student attendance and dropout, which is significant to the proposed study.

The studies reviewed here have looked at the influence of physical environments on behavior. Important links have been made between the physical spaces in schools and how they affect student learning. Academic performance and student participation, as well as student stress, student violence, and student attendance and dropout have been found to be affected by the physical environment. These findings highlight the importance of certain characteristics of school environments, and their effect on students. Elements such as: configuration, condition, density, flexibility, containment, potential for distraction, and privacy can influence students, and should be considered when implementing strategies for student success. These results can help support the relationship between the physical and social environments, and how these influence student learning and behavior as well as school dropout (Gulwadi & Knesting, 2007; Knesting & Gulwadi, 2007). The purpose of the proposed study is to further explore this connection, as it has never previously been investigated, and to explore the relationship
between high school students' sense of belonging at school and their awareness and perceptions of their school environment.

Student “Favorite Places”

Assuming the physical environment has an affect on student behavior and performance, the current study will also look at what places students prefer in their school and what places they do not prefer. Current research in this area suggests that people are able to identify their “favorite places” and give researchers information about why and when they go there, as well as what they do there (Korpela, 1989, 1992; Korpela, Kytta & Hartig, 2002; Malinowski & Thurbert, 1996; Newell, 1997). This is valuable information because it gives researchers insight into the connection between environments and patterns of behavior, which can help uncover reasons for student behavior and outcomes in schools. This section is intended to review what research says about favorite places, and how it is relevant and applicable to students in the current study.

It is important to note that studies on favorite place have involved people of all ages. Adults as well as children are able to identify favorite places when asked. Malinowski and Thurbert (1996) surveyed boys aged 8-16 at summer camp to identify their favorite place at camp. They were interested in differences between older and younger boys, as to what they identified as their favorite place and why they identified that place. They found that younger boys tended to choose places valued for the particular land use (i.e. I chose the baseball diamond because I like to play baseball there), while older boys chose places for their aesthetic or cognitive qualities. They used
this data to examine these environmental preferences in a developmental context. This
study also showed that children as young as 8 years old were able to identify their
favorite place. Another study showed that children as young as preschool are able to
identify their favorite place in their classroom (Duffy & Clark, 2001).

Not only are school aged children able to identify their favorite places, but they
are also able to identify the reason for considering a place to be their favorite. Several
studies have focused on both what adolescents list as their favorite place, as well as why.
Many of these studies have discussed the finding that favorite places often provide self-
regulatory and restorative benefits to people when they go there. Korpela et al. (2002)
describes self-regulation as a “process through which people maintain a balance between
pleasant and unpleasant emotions and a coherent experience of the self; self-regulation
proceeds with the application of environmental as well as mental, physical, and social
strategies” (p. 387). In essence, people use strategies to help regulate their stress in the
environment they choose. Emotions can be renewed as the environment allows positive
emotional changes needed to process stressful life occurrences.

Often, favorite places have high levels of restorative qualities, and provide people
with self-regulating strategies. Korpela (1989) interviewed 9, 12, and 17 year old
students, asking them to write their favorite places, and why they go there. Students
described feelings of pleasure, familiarity, and belonging in relation to the environment.
These were places that they could retreat to for a change in mood and to discharge
negative energy such as to “cry, laugh, and have tantrums” or to “calm down” (p. 249).
These reasons support the connection between the physical environment and self-
regulation, and that a sense of coherence and self can be regained when necessary. The physical identity of such places can allow students, whether consciously or unconsciously, to maintain a sense of self and control their emotions.

These findings were followed-up by similar studies which also interviewed students about their favorite places and the relationship with self-regulation and restorative experiences (Korpela, 1992; Korpela et al., 2002). Korpela (1992) instructed 17 and 18 year olds to write essays about their favorite places. The researcher then analyzed the essays that focused on the importance of the place (rather than social/recreational aspects) and found that internal thoughts and feelings, external stimuli, and social conflicts that threatened self-esteem were reasons for going there. These reasons emphasize the avoidance of pain and threat to self as well as the maintenance of self-esteem and coherence of self-experience, which led the researcher to conclude that these experiences provide environmental self-regulation. Positive experiences in these places were described as providing pleasure, security, belonging, and calm.

An interesting cross-cultural study by Newell (1997) adds to the literature on favorite places. The researchers surveyed people from the United States, Europe, and Africa, about what their favorite place was and why. Results showed more similarities than differences across cultures, and 80% of respondents noted their place as a therapeutic environment. These were places with fewer demands on attention allowing for energy restoration, fewer demands on coping mechanisms, and allowed a chance to reaffirm identity. The most common reasons for going to a favorite place were to relax and recharge, ecological reasons, and safety. These finding support that of Korpela
(1989; 1992) as people identified places that are restorative and allow for emotional restoration.

These studies are relevant in schools as researchers begin to learn why students tend to retreat to certain areas and if these patterns are based on other variables. Educators can use this information to construct positive environments that serve the needs of their students, based on the identity of the physical environment or behavior setting. This can help bridge what is known about student belonging and the school environment by providing information about student characteristics and favorite places. Do certain students prefer certain places? Do students with a greater sense of belonging identify different places than other students? The data from this study could help identify how belonging is related to school construction and appearance, as well as how and why spaces are occupied by students. This is important as schools continue to invest in reducing the rate of high school dropout and increasing student success by increasing sense of belonging.

Conclusion

The purpose for this study was to explore the relationship between high school students’ sense of belonging at school and their awareness and perceptions of their school environment. The study sought to explore the experiences of students at two Midwestern high schools to gain a better understanding of what factors may support belonging and school success in their setting.

The study was done in hopes of finding contributing factors to students’ feelings of connectedness and belonging in their school. It was also completed to
draw on the importance of the physical environment and its influence on belonging, and seek school-level interventions. Thus the research questions included (1) what factors contribute to students' feelings of connectedness and belonging to their school? (2) how does the school's social and physical environment influence students' sense of belonging?
CHAPTER 3

METHODS

The current study sought to bring together research on school belonging and the influence of the physical environment on student learning to investigate whether students’ sense of belonging in school is related to their awareness and perceptions of the physical school environment. The research addressed the following questions (1) what factors contribute to students’ feelings of connectedness and belonging to their school? (2) how does the schools’ social and physical environment influence students’ sense of belonging? This chapter includes the procedures used to gain participation from students, as well as the procedure for administering the survey. The process of obtaining informed consent is also described. The contents of the survey are explained in detail.

Participants

A random sample of 11 students in grades 9-12 from one Midwestern high school was obtained. These students had been randomly assigned to an advisory class by their school at the beginning of their freshman year. The advisory courses at each school included students from each of the four high school grades (9, 10, 11, 12) in each class that meets once a week for twenty minutes. The researcher randomly chose classrooms from each school to include in the study.

Guardian permission was a requirement to participate in this study, and was obtained through signed permission slips. Initially, 250 consent forms were handed out to students at School A and 250 consent forms were handed out at School B. The purpose of the research study was explained to students by the researcher and consent
letters were sent with them to take home to parents. The letters informed parents/guardians of the research study and requested signed permission for their child to participate. Only students who returned parental permission were able to participate in the study. Student participation was voluntary and all participants had the option to withdraw from the study at any time.

After handing out 250 consent forms at School A and 250 at School B, nine forms were completed and returned at School A and five were returned at School B. Due to this low response rate, the researcher decided to focus on obtaining additional consent forms at School A only. Next, a second round forms were handed out again to the same students at School A, encouraging them to take the form home to parents and to return the signed copy to their advisor teacher. After a few weeks, no forms were returned, and the researcher visited each classroom again and encouraged students one more time to participate in the study. After this final attempt, two more forms were completed and returned to the researcher.

School A

According to School A’s 2007-2008 Annual Report, 1,285 students were enrolled in grades nine through twelve. Fifty-six percent of the student body was Caucasian, 40% was African-American, 3% was Hispanic, 1% was Asian, and less than 1% was Native-American. Of the 1,285 students enrolled, 60.4% were eligible for free and reduced lunch. Average daily attendance was 86.9% compared to the state average of 95.8%. The school was part of a district which included one other high school. The total graduation rate for students attending the district was 75.9%. The state graduation rate
was 90.5%. The school’s main structure was originally built in 1874, with additions made several times. In 1939, the music and industrial arts wing were added, and a new gymnasium was built in 1957. New locker rooms, a pool, and extra classrooms were added in 1963. In 2000, the school began working on a renovation project. A new cafeteria, practice gym, wrestling room, locker rooms, and office complex were added. The fourth floor was remodeled to provide new classroom space, and the auditorium was completely renovated. At the time of this study, the building was four stories high with over 80 classrooms.

Survey

The survey was developed by Gulwadi and Knesting (2007) from current literature on school dropout and school environment. The survey began with demographic information, including grade, sex, years attending current school, and English language experience. Next, students completed the 18-item Psychological Sense of School Membership (PSSM) scale (Goodenow, 1993). This scale is made up of questions asking students to rate each “belongingness” statement on a 4-point scale with ratings from 4 (strongly agree) to 1 (strongly disagree). Following the PSSM, participants were presented with questions about their perceptions of their school building and their interactions in this space. Finally, participants were shown a map of their school and asked to identify their three most favorite and three least favorite places.

Procedure

Participants were informed of the nature of the study, and that participation was voluntary and confidentiality was assured. Students were told that they could stop
participating in this project at any time and if they chose to do so they would not be in trouble and their grade would not be affected in any way. Students were then told that if they did not wish to participate, they should simply return a blank questionnaire. Students were informed that their responses to the survey would be completely anonymous. Students were not asked to put their names on any forms.

The researcher administered the surveys during advisory class periods so that no instruction was missed. Surveys took approximately 10-15 minutes to complete. Participants were asked to fill out the survey as completely as possible and it was emphasized that there are no right or wrong answers to the questions, but rather, the researcher was simply interested in what they thought.

All participants were informed that the researcher was conducting research on students' experiences in the school environment. Standardized instructions were placed on the cover of each survey. Participants completed the questionnaires under the supervision and direction of the researcher. A copy of the survey is in the Appendix.
CHAPTER 4

RESULTS

Eleven surveys were completed by students at School A and these results are shared in the following section. Due to the low response rate, a descriptive analysis of these results was completed by the researcher, and the use of descriptive statistics, summary observations, and frequency of responses is used to describe the results of this study.

Demographics

Of the participants that completed the survey, six were female, three were male and two did not identify a gender. Five students were in 9th grade, three in 10th grade, and three in 11th grade. Eight students identified their ethnicity as White, two students as African American, and one student as Hispanic. Ten of the eleven students reported speaking English at home, and one student reported speaking Spanish at home. Eight students said they spoke English “Very Well” and three said they spoke English “Well.” None of the students indicated that they did not speak English well.

Belongingness

The highest possible PSSM score is 4 and the lowest possible score is 1. There is a positive relationship between PSSM score and student perceived level of belonging (Goodenow, 1993). According to Goodenow, the scale midpoint is 3.0. The eleven students in the current study rated their feelings of belonging at their school as mildly low ($M = 2.72, SD = 0.59$). The maximum score by a participant was 3.50 and the minimum score was 1.44. The mean PSSM score for the three males that participated in the study
was lower \((M = 2.24)\) than the six females who participated \((M = 3.00)\). There were differences when comparing 9th \((M = 2.30)\), 10th \((M = 2.93)\) and 11th \((M = 3.20)\) grade scores.

An item-analysis was completed to determine which questions had the highest and lowest overall mean for this limited sample. Question 7 \((M = 3.1)\) and 9 \((M = 3.2)\) were rated the highest overall by students. These questions both center on students' perception of relationships with teachers. Question 7 states, "There's at least one teacher or adult in my school that I can talk to if I have a problem," and Question 9 states, "Teachers are not interested in people like me."

The questions with the lowest overall rating were question 10 \((M = 2.2)\) and 12 \((M = 2.0)\). These two questions focus on feelings of inclusion and acceptance. Question 10 states, "I am included in activities at my school," and question 12 states, "I feel very different from most other students."

The Physical Environment

Following the PSSM, students were asked several questions about the physical environment of their school. The questions regarded the condition of the building, identifying where displays of student work can be found, when and where they find themselves interacting with others, and reporting if they find it difficult to find their way around the building. Most of the students in the study rated the building conditions as fair or poor. Most of the students in the study rated the building conditions as fair or poor. Seven students rated the building conditions as "Fair" or "Poor," three rated it as "Good," and only one rated it as "Excellent." Students did not report difficulty navigating the
building and only one student reported getting lost more than once or twice during the last year.

When asked where student work and achievements were displayed in the building, all 11 students were able to name places where they can be found, but were less able to name places where their own work and achievements could be found. The most common places mentioned where student achievements could be found were the commons/cafeteria \( (n = 9) \), the gym \( (n = 6) \), and the hallways \( (n = 4) \). When students were asked if there were places where their own achievements could be found, only three students were able to name specific places. Students were also asked if there were displays of student work in their building. Nine of the students said yes, two said they did not know. Although a majority of the students were able to name places where student work was displayed, none of them were able to name specific places where their own work was being displayed.

Last, students were asked to identify where and when they interact outside of class. The most common places students said they interact were the cafeteria/commons \( (n = 11) \), hallways \( (n = 9) \), outside the building \( (n = 8) \), and the library \( (n = 5) \). The time of day they listed when they interact was most commonly before class \( (n = 10) \), after school \( (n = 9) \), lunch \( (n = 9) \), and in between class periods \( (n = 8) \).

**Most and Least Favorite Places**

The last part of the survey asked students to look at a map of their school and to mark up to three of their “most” favorite and three of their “least” favorite places in their school. The areas with the highest frequency of “most” favorite were the girls’ gym \( (n = \ldots) \)
5), the auditorium ($n = 3$), the English wing ($n = 3$), and the world language wing ($n = 3$). The areas with the highest frequency of “least” favorite were the business/computer wing on the first floor ($n = 4$) and the history wing on the fourth floor ($n = 4$). The first floor of the building had the highest frequency of total responses, including both most and least favorite, with 32 total markings. The second floor had the second most with 13, the third floor had the third most with 11, and the fourth floor had the least total responses with 5. The first floor had 18 most favorite and 14 least favorite, the second floor had 8 most and 5 least, the third floor had 3 most and 8 least, and the fourth floor had 3 most and 2 least.
CHAPTER 5
DISCUSSION

The purpose of this study was to explore the relationship between student experiences in the school environment and school belonging. The researcher was interested in exploring factors that contribute to school belonging, and how these factors are related to the social and physical environment. A research study has never before sought to bring these two bodies of literature together in this way, and therefore this study served as a pilot study in this area. While a low response rate makes it impossible to generalize the information gathered, the study generates useful information for future explorations. This section will focus on implications for future research, and how the methods and procedures employed could guide further attempts at linking belonging with the social/physical environment. The specific methods, procedures and results from this study will be summarized, followed by a discussion on the difficulty of obtaining consent from research participants who are not of legal age to give consent.

The eleven students who participated in the study had an overall rating of psychological school membership that was mildly low ($M = 2.72$) as compared to the scale midpoint of 3.0 (Goodenow, 1993). Further studies could continue to compare belonging to the scale midpoint as a reference, or begin comparing differences among subgroups. Evidence of construct and criterion validity have been supported in previous research groups using the PSSM, but further research could continue to explore and support these relationships to better inform intervention, and improve educational outcomes for students (Goodenow, 1993; Hagborg, 1994). An item-analysis in this study
suggested certain variables could be affecting students' overall sense of belonging more than others. The students in this study rated two questions about relationships with teachers as high and two questions pertaining to inclusion and acceptance as low. Future studies could continue to explore an item-analysis approach to determine which variables influence overall belonging, and where to target intervention for specific groups of students.

The PSSM ratings of males who completed this survey were lower than those of the females who participated. Although this result was suggested by a small sample, it is consistent with previous research using the PSSM. Goodenow (1993) hypothesized that because girls in middle-school tend to be more comfortable and involved in school than boys, that boys' scores on the PSSM would be lower than those of girls. The results of her study showed a main effect for sex differences in the predicted direction. Further investigation of sex differences could lead to more information about patterns between genders. It could also lead researchers to better understand why females may tend to have a greater sense of belonging than males, what the reasons are for these differences, and how these differences are related to the social and physical environment.

Students in the current study were asked to provide their grade level when they filled out the survey. Comparisons by grade level supported that the higher the grade of the student, the higher their sense of belonging. This finding is not meant to be generalized from this sample alone, but one could hypothesize that the longer a student has been in a school, the more comfortable they begin to feel, and the greater sense of belonging they develop. Perhaps belonging is built over-time, and time may be needed
for strong relationships to grow. Goodenow (1993) did explore the effect of grade-level on belonging using the PSSM, but did not find a main effect. Future research could attempt to confirm or disconfirm this hypothesis based on the relationship between grade-level and belonging.

When students were asked where student work and achievements were displayed in the building, they were able to name specific places they can be found, but were less able to identify where their own work and achievements could be found. Results from Killeen, Evans, and Danko (2003) suggest that students who attend schools with more permanently displayed works of art have a greater sense of ownership in their school. Although students in the current study identified that achievements and work were displayed in their building, they may not feel ownership over these displays because they do not represent their personal contributions. Perhaps students in the current study would have rated their level of belonging as greater if they had more of their own products and achievements displayed in their school. Future research could further explore the relationship between displays of student artwork and achievements with student belonging.

When rating the physical condition of their school, the majority of the students in this study did not give a favorable response. Many of them rated the conditions as poor or fair, while few rated them as good or excellent. Branham’s study in 2004 suggested that school structure and conditions affect student learning. He found students less likely to attend, and more likely to dropout of schools in need of structural repair, that use temporary classrooms, and have understaffed janitorial services. Students in the current
study rated the physical condition of their building as low. They also rated belonging as low, while student attendance and graduation rates are below the state average. There may be a link between the physical conditions of school structures and dropout, but future research is needed to help support this link.

Modifications to the administration of the survey may also better capture belonging as related to the physical environment. The survey could be read aloud to students and explained by the researcher while answering student questions. The group could follow standardized procedures involving better clarification for students. The map portion was the most difficult for students to understand, and researchers could be of more assistance when students are determining how to mark their map. The school in the current study had four floors within the structure, and four different pages to represent the map of their school. There was a large area for students to consider, which may have made it difficult for them to locate the places they wished to identify. It may have been beneficial for the map to be all on one page, as students may not have taken the time to look at each page of the map. The first floor of the building had the highest frequency of total responses, including both most and least favorite. This could be related to students’ actual perceptions, but students also may not have considered the whole building while instead focusing on the first page of the map presented to them.

After administration of the survey, it would also be beneficial to follow-up with students about their answers. Focus interviews could be conducted for clarification of responses and to probe deeper for more thorough and complete answers that could unearth linkages between concepts in this study. The survey could be administered to
students, and after completion of the survey researchers could follow-up with these students to get more comprehensive responses. This would help tie the two areas together by asking students why they responded to items in a certain manner, and give more support to the survey responses.

Perhaps the most difficult issue in the current study was obtaining parent-signed informed consent for student participation. To conduct research with children, active consent from parents is required if the study involves risk that is greater than what is typically encountered in everyday life (U.S. Department of Health and Human Services, 2005). These safeguards are in place to protect children from entering into potentially harmful situations, and to ensure parents are informed of what their children are being asked to participate in. Although these codes of ethics are understandably necessary, the use of active informed consent in survey research increases the difficulty of obtaining parental consent (Harrell, Bradley, Dennis, Frauman & Criswell, 2000; Ross, Sundberg & Flint, 1999). Receiving signed consent from parents involves several steps. The student must remember to take the form home, show it to their parent(s) who agrees and signs, and then the student must return the form to school. All steps must be completed in order for the researcher to have a participant. This process was used in the current study, and is likely related to the small sample actually eligible to take the survey.

Another type of consent, implied consent, can be approved by Institutional Review Boards (IRB) for studies that are considered minimal risk. Minimal risk means that the probability of harm anticipated in the research is not greater than what is ordinarily encountered in daily life, or during the performance of routine psychological
examinations (U.S. Department of Health and Human Services, 2005). Implied consent is given when the student takes the information about the study to the parent and the parent reads the information. The parent must then check a box stating they do not wish for their child to participate in order to reject the implied consent. The IRB involved in the study required the researcher to obtain informed written consent from parents, and implied consent was not an option.

Not only is it more difficult to get responses when additional steps are required for consent, but it can also bias survey results. Students who are more actively engaged in school are more likely to follow-through with the process involved (Goodenow, 1993). These students’ responses may underestimate the occurrence of the behavior being observed, and may have captured the opinions of students who already have a greater sense of belonging than other students in this study. Previous research has also found that students who do not provide informed consent are more likely to have disciplinary problems such as truancy (Henry, Smith & Hopkins, 2002), be described by their peers and teachers as less socially integrated, more aggressive, and less academically competent (Henry et al., 2002; Noll, Zeller, Vannatta, Bukowski & Davies, 1997), and to have low socioeconomic status or change residences frequently (Dent et al., 1993). Information from these groups is less likely to be captured in student research, and can cause serious bias in interpretation of the information gathered.

Unger et al. (2004) conducted a study using a dual-consent procedure. Active consent forms were sent home describing two surveys children were asked to participate in. The first survey required the parent to sign and return the form giving informed
consent, but the second survey required only implied consent for which the parent did not need to return a signed form. If the parent did not want their child to participate in either or both surveys they were to check a box stating so and return the form. Students then completed both surveys if the parent provided signed consent, the second survey if the parent did not return the form and gave only implied consent, or neither survey if the parent declined their participation.

Results indicated that 76% of the invited students provided active parental consent, 15% provided implied consent (parent nonresponse) and 9% provided active parental refusal. The researchers noted that the implied consent procedure included more boys, African Americans, students with poor grades, and smokers. Also, including the implied consent group increased the total consent rate from 76% to 91% and was useful for collecting some additional data from students who did not provide active consent or refusal. This study reiterates that there are differences among students who provide consent from parents and those who do not.

**Conclusion**

The current study can serve as a pilot study for future research focused on bringing together student belonging and aspects of the social/physical environment. The research questions included (1) what factors contribute to students' feelings of connectedness and belonging to their school? (2) how does the school's social and physical environment influence students' sense of belonging? Differences in belonging were noted by gender and grade-level. Ratings of females indicated a higher sense of belonging than males, and student grade-level had a positive relationship with
belonging. Participants in the study may have had a greater sense of belonging if more of their own products and achievements were displayed in their school or if the physical conditions of the building were more favorable. A limited response rate makes generalizing these results impossible, but the data can help inform the direction of future studies. Differences between and within groups in relation to belonging and the physical environment should continue to be explored, but also with a continued consciousness of how consent methods and procedures can influence results. Obtaining informed consent for students can be a difficult process, and takes careful planning and consideration. These efforts need to be made to better inform intervention for students who are at-risk for school dropout, and to better understand the factors that facilitate school success for all students.
REFERENCES


APPENDIX: STUDENT SURVEY

Student Experiences in the School Environment

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Background Information:

Grade: ___ 9th ___ 10th ___ 11th ___ 12th
Sex: ___ Male ___ Female

How many years have you attended this school?
___ Less than 1 ___ 1 ___ 2 ___ 3 ___ 4

Do you speak a language other than English at home? ___ yes ___ no

What is this language? ____________

How well do you speak English?
___ Very Well ___ Well ___ Not Well ___ Not at all

Below are statements about attitudes toward school. For each one, please tell us how much you agree or disagree with each statement.

Please respond using the following scale:

4 = Strongly Agree, 3 = Agree, 2 = Disagree, 1 = Strongly Disagree

1. I feel like a real part of my school.
   4  3  2  1

2. People at my school notice when I’m good at something.
   4  3  2  1

3. It is hard for people like me to be accepted at my school.
   4  3  2  1

4. Other students in my school take my opinions seriously.
   4  3  2  1

5. Most teachers at my school are interested in me.
   4  3  2  1

6. Sometimes I feel as if I don’t belong at my school.
   4  3  2  1

7. There’s at least one teacher or adult in my school that I can talk to if I have a problem.
   4  3  2  1

8. People at my school are friendly to me.
   4  3  2  1
9. Teachers at my school are not interested in people like me.
   4 3 2 1

10. I am included in activities at my school.
    4 3 2 1

11. I am treated with as much respect as other students.
    4 3 2 1

12. I feel very different from most other students.
    4 3 2 1

13. I can really be myself at school.
    4 3 2 1

14. The teachers respect me.
    4 3 2 1

15. People at my school know I can do good work.
    4 3 2 1

16. I wish I were in a different school.
    4 3 2 1

17. I feel proud of belonging to my school.
    4 3 2 1

18. Other students at my school like me the way I am.
    4 3 2 1

19. I would feel more comfortable at my school if:

20. How would you describe the general condition of your school building?

   ____ Excellent, as a whole the building is in good condition
   ____ Good, many areas are in good condition
   ____ Fair, some areas are in good condition
   ____ Poor, few areas are in good condition

21. Are there spaces in your school that display student achievements (i.e., trophies, awards, etc.)?

   ____ Yes    ____ No    ____ I don’t know
If you answered “Yes,” please list three of the places where student achievements are displayed:
1. ____________________________ ____________________________ ____________________________
2. ____________________________ ____________________________ ____________________________
3. ____________________________ ____________________________ ____________________________

22. Are there spaces in your school where your achievements are displayed?
____ Yes  ____ No  ____ I don’t know

If you answered “Yes,” please list three of the places where your achievements are displayed:
1. ____________________________ ____________________________ ____________________________
2. ____________________________ ____________________________ ____________________________
3. ____________________________ ____________________________ ____________________________

Are there spaces in your school that display student work (i.e., artwork, class work, etc.)?
____ Yes  ____ No  ____ I don’t know

If you answered “Yes,” please list three of the places where student work is displayed:
1. ____________________________ ____________________________ ____________________________
2. ____________________________ ____________________________ ____________________________
3. ____________________________ ____________________________ ____________________________

23. Are there spaces in the school where your student work is displayed?
____ Yes  ____ No  ____ I don’t know

If you answered “Yes,” please list three of the places where your work is displayed:
1. ____________________________ ____________________________ ____________________________
2. ____________________________ ____________________________ ____________________________
3. ____________________________ ____________________________ ____________________________
24. How easy is it for you to find your way around your school building?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Very Easy</td>
<td></td>
<td></td>
<td></td>
<td>Very Difficult</td>
</tr>
</tbody>
</table>

25. How many times in the past year have you lost your way in your school building?

- ___ 0 times
- ___ 1-2 times
- ___ 3-4 times
- ___ 5-6 times
- ___ 7-8 times
- ___ More than 8 times

26. Where do you interact with other students outside of class? Check all that apply.

- ___ Hallways
- ___ Gymnasium
- ___ Commons area
- ___ Music room
- ___ Art room
- ___ Other:

27. When do you have opportunities to interact with other students outside of class?

- ___ Before classes begin
- ___ Free periods
- ___ After school
- ___ In-between class periods
- ___ Lunch time
- ___ Other:

_____________________________
The next few pages contain a map of your high school. Circle up to 3 places on the map that you would describe as your most favorite places at school. Write the word “MOST” next to each of these places. Next, circle up to 3 places on the map you would describe as your least favorite places at school. Write the word “LEAST” next to each of these places.