THE EFFECT OF SMALL LEARNING COMMUNITIES
ON INDICATORS OF STUDENT PROGRESS

A DISSERTATION
SUBMITTED TO THE FACULTY OF THE GRADUATE SCHOOL
OF THE UNIVERSITY OF MINNESOTA
BY

Cheryl Stone Bemel

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

Sandra Christenson, Theodore Christ, Co-advisers

June, 2009
Acknowledgements

I am especially indebted and grateful for the generous mentoring from my examining committee: Dr. Sandy Christenson, Dr. Matt Burns, Dr. Ted Christ, and Dr. Kyla Wahlstrom. I truly enjoyed getting to know each of you during my academic studies and research activities. It has been a privilege to be a student under your guidance at Minnesota; the program is outstanding. I owe particular thanks to Dr. Christenson for being an advisor who motivated and encouraged me throughout the program.

I would like to thank Hennepin County Medical Center for allowing me the privilege to intern at such an outstanding facility. I thank many professionals for teaching me to be curious and to believe in myself: Dr. Mark Weisberg, Dr. Jon Twomey, Dr. Al Clavel, Dr. Dave Wark, Dr. Eric Vanden Berk, Dr. Eric Schiffman and Dr. Andrea Szporn. I am now a better psychologist, having learned from the best.

I would like to thank those very close to my heart; Mia Bradlinéa, friend and provider of support at all times, as well as my incredible support system of intelligent, precious, everlasting friends. You know who you are and how much I treasure you.

Sanford, you are my rock. Thank you for supporting me in all ways while I pursued my dream to seek a Ph.D. Your unfailing support, commitment, belief and love have been amazing. Thank you from the bottom of my heart.

I save the best for last. I thank my joyous, sensitive, wonderful children: Blaire, Spencer and Hayley, who continue to amaze me with their natural gifts and their love of learning. While earning the Ph.D. has been a worldly dream I have always had, my innate dreams came true when you all came into my life. “Same Plan,” “Mama Loves,” “Uh-huh,” “Oh fine,” “Peace/Sorry/I love you.” HEY GUYS, MAMA IS DONE! — C.S.B.
Dedication

This dissertation is dedicated to the following individuals who have made a difference across the world through their work, dedication and resonance with others:

Never, never, never give up.  
—Winston Churchill

It is never too late to be what you might have been.  
—George Eliot

Obstacles are those frightful things you see when you take your eyes off your goal.  
—Henry Ford

All the adversity I've had in my life, all my troubles and obstacles, have strengthened me.  
... You may not realize it when it happens, but a kick in the teeth may be the best thing in the world for you.  
—Walt Disney

When you're curious, you find lots of interesting things to do.  
—Walt Disney

Yes we can.  
—Barak Obama

For of all sad words of tongue or pen, the saddest are these: ‘It might have been!’”  
—John Greenleaf Whittier

Do, or do not. There is no 'try'.  
—Yoda (“The Empire Strikes Back”)
Abstract

The purpose of this study was to examine the effects of two different small learning community (SLC) models on indicators of student progress. Participants were 100 students enrolled in a large urban high school in a Midwestern state as well as 23 of their teachers. Of the two small learning community models studied, one was reportedly a high-functioning SLC while the other model was considered poorly-functioning. Students from the poorly functioning SLC were placed into the higher-functioning SLC and comparisons were made. After controlling for pre-test measurement error, increases in attendance were associated with placement in a higher-functioning SLC after one year. Qualitative analysis provided further support to the finding; students’ perceptions of their school experience improved after re-placement. Implications of results in terms of the efficacy of SLCs, future directions for SLC research, and the importance of relationships in the educational arena are discussed.
Table of Contents

Acknowledgements.............................................................................................................. i

Dedication........................................................................................................................... ii

Abstract .............................................................................................................................. iii

List of Tables ..................................................................................................................... vi

List of Figures .................................................................................................................. viii

CHAPTER 1 .......................................................................................................................1

Purpose of the Study ............................................................................................... 2

Research Questions and Hypotheses ...................................................................... 5

CHAPTER 2 Literature Review ......................................................................................... 8

Conceptualization of the Construct of Engagement and Its Indicators...... 8

Theoretical Constructs of Engagement................................................................. 9

Influences of Motivation Theory .............................................................................. 11

The Importance of Autonomy and Self Efficacy ............................................... 13

The Power of Enriched Emotional Experiences .............................................. 15

The Importance of Relatedness and the Need to Belong.............................. 19

Contributions of Attachment Theory ................................................................. 26

The Importance of a Personalized Education .................................................. 26

Small Learning Communities .............................................................................. 31

Characteristics of Effective Small Learning Community Practices ....... 31

The Reality of SLC Implementation ................................................................. 39

Conceptual Concerns Related to SLCs ............................................................... 51
CHAPTER 3 Method........................................................................................................ 55

Participants............................................................................................................... 55
Materials .................................................................................................................. 59
Dependent Variables................................................................................................. 66
Procedures................................................................................................................. 72
Conditions.................................................................................................................. 77
Analyses.................................................................................................................... 83

CHAPTER 4 Results......................................................................................................... 86

CHAPTER 5 Discussion................................................................................................. 111

Summary of Findings................................................................................................. 111
Merits and Limitations............................................................................................... 115
Directions For Future Research ............................................................................... 121
Implications for Practice and Policy ......................................................................... 122

REFERENCES ............................................................................................................... 125

APPENDIX A Definitions Related to Cotton’s Essential Elements
for Small Learning Communities.................................................................................. 137

APPENDIX B SLC Student Engagement Survey (SLCSES) ........................................... 143
APPENDIX C Student SLC Interview (SSI) .................................................................... 151
APPENDIX D Staff SLC Survey (SSS) ........................................................................... 169
APPENDIX E Permission Letters ................................................................................... 173
APPENDIX F Training Sessions .................................................................................... 180
APPENDIX G SSS Staff Comments Regarding Their Assigned SLC............................ 185
List of Tables

Table 1. Student Engagement Versus Disaffection (Furrer et al., 2006) ........................................ 17
Table 2. Oxley’s (2005a, 2006) Model for SLC Implementation .................................................. 33
Table 3. Essential Elements of Small Learning Communities (Cotton, 2001) .............................. 35
Table 4. High Schools: A Review of Six Small Learning Communities in the United States ......................... 40
Table 5. Grade 10 SLC Transfer Group and Continuous Enrollment Group Demographics ................................................................. 57
Table 6. Internal Consistency (Cronbach’s α) For SLCSES Subscales in the Current Study ......................... 61
Table 7. Open-ended Questioning Item .......................................................................................... 62
Table 8. Dichotomous Items ......................................................................................................... 64
Table 9. Likert-style Item for Perceptions of Competence ............................................................ 65
Table 10. Twelve Dependent Variables, Corresponding Ranges, and Methods Used ................. 69
Table 11. SSS Staff Retrospective Perceptions ................................................................................. 79
Table 12. Staff Responses to SSS Open-ended Items ...................................................................... 82
Table 13. Descriptive Statistics for Transfer Group and Continuously Enrolled Group ......................................................... 87
Table 14. ANCOVA Results for GPA and Accrued Credits .......................................................... 90
Table 15. ANCOVA Results for Attendance .................................................................................. 91
Table 16. ANCOVA Results for Teacher-Student Relations ......................................................... 92
Table 17. ANCOVA Results for Peer Support ............................................................................... 92
Table 18. ANCOVA Results for Family Support .......................................................................... 93
Table 19. ANCOVA Results for Control and Relevance of Schoolwork ......................................................... 94
Table 20. ANCOVA Results for Future Aspirations and Goals ................................................................. 94
Table 21. Descriptive Statistics for Three SSI Items ...................................................................................... 97
Table 22. Responses to Perceived Control Open-ended Questions ............................................................ 98
Table 23. Responses to Perceived Connection Open-ended Questions ...................................................... 101
Table 24. Responses to Perceived Effort Open-ended Questions .............................................................. 104
List of Figures

Figure 1. Student-Rated Item of Perceived Control .......................................................... 63

Figure 2. Student-Rated Item of Perceived Connection .................................................... 63

Figure 3. Student-Rated Item of Perceived Effort ............................................................. 64

Figure 4. Bivariate distribution of GPAs for the treatment and control groups............... 89
CHAPTER 1

The concept of the small learning community (SLC) has earned national attention due to recent educational mandates, poor high school completion rates, and America’s desire for a more prepared work force upon completion of high school (National Center for Education Statistics, 2004; Oxley, 2001). Adolescents face numerous challenges in their efforts to stay in school and earn high school diplomas (Lehr, Clapper, & Thurlow, 2005; Morse, Anderson, Christenson, & Lehr, 2004). One recent estimate of the percentage of students who do not complete high school is approximately 11% of the high school population and can range as high as 28% in certain population segments (Dynarski et al., 2008). This equates to more than half a million children dropping out of high school annually, with the rate of dropout remaining relatively constant for the past 30 years (Dynarski et al.).

Prominent researchers have identified the importance of positive relationships between staff and students when understanding student success and behavior (Anderson, Christenson, Sinclair, & Lehr, 2004; Osterman, 2000; Oxley, 2006; Suldo et al., 2009). As the No Child Left Behind Act of 2001 (NCLB, 2001) calls upon our schools to reform and improve their ability to produce competent graduates, it is crucial students believe they are an important part of their school and feel a sense of connectedness to the school community. The SLC model is an educational innovation that has grown in popularity (Lounsbury, 2002; Owen, Cooper, & Brown, 2002; Oxley, 2001; Wasley et al., 2000). Educational reformers have attempted to use the small learning community model to convert large high schools into smaller, more supportive learning environments as a
means of fostering student feelings of belongingness and personalization by reducing teacher and student anonymity (Vander Ark, 2002).

In order to measure variables associated with SLCs and student performance, the wide-ranging construct of student engagement was utilized in this study. The broad construct of engagement includes student behaviors, thoughts, and feelings, such as attendance, effort and belongingness (Connell & Wellborn, 1991; Finn, 1989), as well as perceived feelings of efficacy (Deci & Ryan, 1985). This study examined factors associated with four subtypes of the construct of student engagement proposed by Christenson and Anderson (2002): (a) cognitive, (b) affective, (c) behavioral and (d) academic. These subtypes have been empirically demonstrated to correlate with expected educational outcomes (Appleton, Christenson, Kim, & Reschly, 2006).

While cognitive, academic and behavioral engagements are important for student success, the emotional aspects of a student’s experience have received a great deal of attention from SLC proponents. SLC advocates have stressed the importance of belonging, or perceived connection, as a key solution for student success. However, an empirical base has yet to exist demonstrating that SLCs promote affective engagement indicators such as a sense of belonging and connection.

Purpose of the Study

This thesis examined the likelihood that implementation of SLCs may play an important role in student success. The purpose of this study was to explore the effects of two different small learning community models on quantitative and qualitative indicators of student progress, as well as to identify areas for future research. While SLCs may improve salient indicators of student academic progress, the relationship between SLC
implementation and student performance remains insufficiently examined. Although increasingly robust student academic gains have been claimed by educators promoting the small learning community model (Lounsbury, 2002; Vander Ark, 2002), SLC research to date has shown major methodological flaws that need to be addressed. Much of the existing research has been based on qualitative methods and anecdotal reports (Cotton, 2001; Fine, 1988; Oxley, 2005a). Quantitative data, such as grade point averages, credits accrued, and standardized test scores, have been sparsely reported.

At this time, like no other, educational accountability is reframing how our schools are funded and maintained (No Child Left Behind Act of 2001). Indeed, society must demand educational accountability that includes rigorous SLC research with experimental controls in order to identify effective SLC implementation models. Such rigorous research investigating SLC outcomes for students is necessary to demonstrate the utility of the particular innovation (Ellis, 2005). SLCs have continued to grow in popularity across the nation without well documented, systematic implementation methods and conceptual frameworks. If successful foundations for SLC implementation can be demonstrated through controlled research, then sustaining effective SLC models will improve student outcomes in the future. Further investigation may yield vital information for the formation of effective educational innovations, creating improved learning capacities for our students.

Additionally, few studies have utilized quasi-experimental or experimental designs as a means of demonstrating causal links between the use of SLCs and student benefits. Further study of the effectiveness of SLCs on student outcomes is imperative, in spite of challenges associated with measuring this educational innovation. Anecdotal
reports would lead the uninformed educator to believe SLC implementation affects student success, yet there are no empirical studies exploring the relationship between SLCs and student improvement. The proliferation of SLCs, accompanied by government funding, has unmistakably demonstrated adoption of the innovation without an existing empirical base at this time. Given the paucity of rigorous research in this area, further research investigating SLC outcomes for students is necessary. Alternatively, the innovation referred to as the SLC may take a downward turn. As Cotton has noted,

> The last thing small school proponents want to see is a future in which school downsizing ends up on the dead fad pile, with students reaping few benefits from it, funding agencies declaring it a bust, and school personnel across the country remarking wistfully, ‘Oh, we tried small schools, but they didn’t work.’ (Cotton, 2001, p. 5)

The current study advances the literature regarding SLC outcomes in several areas. First, it examines specific key organizational practices educators feel are important for SLC implementation and compares these practices to SLC models currently being implemented. Second, this study is unusual because it utilizes a quasi-experimental design in order to independently investigate student outcome indicators of SLC implementation, and is apparently the first study to do so. Third, it examines student progress indicators across points in time. Fourth, the study utilizes a modified technologically sound research instrument, the SLC Student Engagement Survey (Bemel, 2007) to evaluate student perceptions of engagement indicators, while considering two separate models of SLC implementation. Finally, this is one of few, if not the only study to examine the connection between SLC implementation, student progress, and student perceptions.
The need for research examining the likelihood of empirically justified SLC interventions proving effective for positive student gains has become critical. At this time, a well-justified empirical link between SLC implementation and student outcomes is deemed overdue. Further investigation may yield vital information for the formation of effective educational innovations, creating improved learning capacities for our students.

Research Questions and Hypotheses

This study addressed the following research questions as a means of investigating the effect of two small learning community models on student progress. Based on engagement theory, student progress (or lack thereof) was represented by specific indicators of academic engagement, affective engagement, behavioral engagement, and cognitive engagement. The study’s primary hypothesis predicted students placed into a higher-functioning SLC would increase their performance based on indicators of engagement. Reasons for the hypothesis include: 1) a review of the small learning community literature suggests student performance increases after experiencing a well-functioning SLC; 2) a review of engagement literature appears to support SLC practices (when implemented according to SLC literatures’ standards of best practices); and 3) research has demonstrated that one’s social surround impacts one’s perceptions of self. The first research question addressed was:

1. What are the effects of participation in a quality SLC on student progress as measured by the following engagement indicators?
   a. Academic engagement (credits accrued, grade point average).
   b. Behavioral engagement (attendance record).
c. Affective engagement (teacher-student relations, peer support, family support).

d. Cognitive engagement (perceived control and relevance of school work, future aspirations and goals).

In addition to the first research question, the following hypotheses were proposed.

i. The transfer group was expected to demonstrate significantly increased mean scores regarding number of credits when compared to the continuously enrolled group.

ii. The transfer group was expected to demonstrate significantly increased mean scores regarding grade point average when compared to the continuously enrolled group.

iii. The transfer group was expected to demonstrate significantly increased mean scores regarding attendance than the continuously enrolled group.

iv. The transfer group was expected to demonstrate significantly increased mean scores on an indicator measuring student-teacher relationships than the continuously enrolled group.

v. The transfer group was expected to demonstrate significantly increased mean scores regarding peer support than the continuously enrolled group.

vi. The transfer group was expected to demonstrate significantly increased mean scores regarding perceived family support than the continuously enrolled group.
vii. The transfer group was expected to demonstrate significantly increased mean scores regarding perceived control and relevance of school work than the continuously enrolled group.

viii. The transfer group was expected to demonstrate significantly increased mean scores regarding future aspirations and goals than the continuously enrolled group.

The second research question was exploratory:

2. What are the differences in perceived control, perceived connection, perceived effort, perceptions of competence, and perceived autonomy between students reassigned to a quality SLC and students who continuously attended the quality SLC?
CHAPTER 2

Literature Review

This chapter initially reviews the construct of engagement by addressing early conceptualization by several theorists and researchers, ultimately converging on a more recent model that conceptualizes engagement as four subtypes: academic, behavioral, cognitive, and affective (Appleton et al., 2006). Because engagement stems from multiple theoretical underpinnings, many concepts are shared amongst various engagement subtypes and such overlap is intentional. Next, theories and conceptual issues relative to engagement are discussed. Included in this discussion are influences from motivation theory, contributions of attachment theory, the importance of autonomy, the power of relatedness, and, finally, the importance of personalized education with enriched emotional experience. After discussing theories relative to engagement, the chapter focuses on constructs that comprise the foundation for SLCs, which are not surprisingly intertwined with theoretical underpinnings of engagement. Characteristics of effective small learning practices are reviewed, and current implementation models of SLCs are explored. Finally, theory implementation, with particular attention given to conceptual issues, concludes the chapter.

Conceptualization of the Construct of Engagement and Its Indicators

While the engagement literature has provided us with various types of engagement, few integrated approaches have been offered. In a review of literature focusing on student engagement, Libbey (2004) found overlapping and redundant terms. Common terms included school engagement, school attachment, bonding and school connectedness, with the latter term representing the study of a student’s relationship to
school. More recently, the term student engagement has been offered to represent components of engagement for students in the school environment (Appleton et al., 2006).

Theoretical Constructs of Engagement

The construct of engagement has been coined as a possible “meta-construct” comprised of multiple components that have been brought together into one construct (Fredricks, Blumenfeld, & Paris, 2004). Because the construct is so multi-faceted, numerous researchers have attempted to define the meta-construct (Appleton et al., 2006; Fredericks et al.; Jimerson, Campos, & Greif, 2003). Multiple theories have been reviewed herein; clarification of the term engagement warrants attention. While the engagement literature has provided us with various types of engagement, few integrated approaches have been offered.

Finn (1989) proposed a model of engagement comprised of two components (behavioral and affective). Behavioral components included participation in school and the classroom, while affective components referred to less observable indicators including school identification, belonging and the value of learning as perceived by the student. More recently, researchers theorized and empirically supported three types of engagement: behavioral, cognitive and affective (Christenson & Anderson, 2002; Fredricks et al., 2004). This integrated approach to engagement has grasped the importance of featuring emotions as a key factor while providing a more comprehensive understanding of engagement.

Christenson and colleagues (Anderson et al., 2004; Appleton et al., 2006; Sinclair, Christenson, Lehr, & Anderson, 2003) have conceptualized engagement as a
multidimensional construct consisting of four indicator types: academic, behavioral, affective\(^1\) and cognitive. Academic and behavioral engagement indicators are readily observable and, therefore, more readily studied as a result of availability to researchers. Indicators of academic engagement include variables such as time on task, number of credits accrued, grade point average, and homework completion, while indicators of behavioral engagement address number of suspensions, attendance, voluntary participation in the classroom, and extracurricular participation. Not surprisingly, affective and cognitive engagement includes more internal indicators that are less observable. Indicators of affective engagement include relationships with teachers and peers, feelings of belonging, feelings of identification with school, and pride related to one’s school. Cognitive engagement may be indicated by one’s personal goals, autonomy, perceived value of learning, self-regulation, perceived control and perceived relevance of schoolwork to future ambitions.

Of the four engagement subtypes, each subtype has multiple indicators as noted above, and a student’s level of engagement is determined based on these indicators (Sinclair et al., 2003). Research has shown that students who are more engaged in school are more likely to achieve than their non-engaged age-mates (Connell & Wellborn, 1991; Finn, 1989; Klem & Connell, 2004). With caring and supportive relationships at school, students demonstrated more cognitive behavioral, academic and affective engagement indicators during their school career (Christenson & Thurlow, 2004; Connell & Wellborn).

\(^1\) While the term psychological engagement was initially used by Appleton et. al, 2006, these researchers eventually changed the term to affective engagement. The term affective engagement will be used in this thesis.
Influences of Motivation Theory

Connell and Wellborn (1991) created a model of “sense of self” based on three fundamental needs: competence, autonomy, and relatedness. Originating from theoretical underpinnings related to motivation, these authors’ “motivational analysis of self-system processes” addresses one’s fundamental needs. The need for competence relates to the need to view oneself as being able to generate desired consequences and avoid undesirable consequences (Deci & Ryan, 1985), while the need for autonomy relates to one’s experience of making choices while monitoring the connection between one’s actions, goals and values. Autonomy has also been referred to as the connection between will and action, or the extent one feels comfortable demonstrating behaviors of choice, rather than demonstrating behavior due to another’s agenda (Patrick, Skinner, & Connell, 1993). The need for relatedness concerns feeling safely connected with others while viewing oneself as deserving of love and respect (Connell & Wellborn).

In this model it has been postulated that perceived competence in school children is self-appraised by feedback from performance measures such as homework, exams and academic ranking. Such internal beliefs related to self competence have been especially relevant for diminishing or strengthening engagement in school (Connell & Wellborn; Deci, Vallerand, Pelletier, & Ryan, 1991). As children evaluate their degree of autonomy, competence and relatedness they are engaging in such self-system processes, resulting in feelings related to efficacy or deficiency. Self-efficacy refers to the belief that one can perform a specific action or complete a task. Perceived self-efficacy has been demonstrated to influence levels of performance by enhancing intensity and persistence of effort (Bandura, Adams, & Beyer, 1977).
Connell and Wellborn’s (1991) theoretical model of self-system processes is especially important when considering educational reform. When key psychological needs are met within specific contexts such as family or school, engagement occurs and is demonstrated emotionally, behaviorally, and academically. Likewise, when psychological needs are not met, disaffection results and is displayed through less than desirable emotional, behavioral, and academic outcomes. Resulting disaffection or engagement occurs based upon patterns of student actions, since such actions mediate the relationship between self-system perceptions and outcomes of skill development and adjustment (Connell & Wellborn; Furrer, Skinner, Marchand, & Kindermann, 2006). Ultimately, schools attempt to foster motivation amongst students by providing a supportive, personalized environment which then fosters autonomy, competence and relatedness.

Children who are not engaged tend to demonstrate a lack of positive emotions such as enthusiasm, optimism and interest. These children do not initiate action when provided with the opportunity, nor do they exert strong effort and focus while trying to learn new tasks (Skinner & Belmont, 1993). Such children may be sad, worried and bored in the classroom. Furthermore, investigators have demonstrated the significant relationship between teacher behavior and student engagement in the classroom (Skinner, Wellborn, & Connell, 1990). Implications for monitoring and changing patterns of teacher-student interaction are paramount; if left without intervention, teachers tend to magnify a child’s initial level of engagement (Skinner & Belmont). With regard to students already demonstrating low motivation, their typical school experience may yield further deterioration of their motivation.
Similarly, a child’s perception of control has been found to influence behavior (Patrick, Skinner, & Connell, 1993). Control refers to the link between behaviors and outcomes. It is important for students to feel capable of producing desired outcomes and preventing negative outcomes. It has been demonstrated that children with low perceived control chose to not even attempt work (Skinner, Wellborn, & Connell, 1990).

The Importance of Autonomy and Self Efficacy

Many studies have built upon Connell and Wellborn’s (1991) theoretical model proposing that student engagement will be maximized when the child’s basic psychological needs are met. Skinner and Belmont (1993) explored 144 third, fourth, and fifth grade students to evaluate whether primary needs were either fulfilled or denied in the school environment. The investigators found that attitudes and beliefs about the self (self-esteem) were influenced by teacher behaviors. Specific teacher behaviors proved more effective in meeting student needs, such as providing optimal structure (e.g., communicating clear expectations, responding consistently, offering help and support, adjusting teaching techniques to the child’s level); providing autonomy support (e.g., allowing children a range of learning activities, connecting student activities with children’s own interests); and being involved (e.g., taking time for the student, expressing affection, enjoying interactions).

The aforementioned study supported Connell and Wellborn’s hypothesis that student self-appraisals occur regularly, and by having needs met or ignored in the school environment, student self-esteem processes flourished or withered. Such self-appraisals of competency are the key predictors of student motivation, according to these authors. Results demonstrated strong empirical support for the notion that student engagement in
the classroom is connected to teacher behavior that is highly involved, provides structure and is autonomy supportive. The study presented a strong case related to the reciprocal effects of teacher behavior and student engagement.

Similarly, building on the conceptualization that optimal psychological adjustment may likely affect the trajectory of a student’s engagement and, ultimately, school success, Deci et al. (1991) utilized the importance of autonomy, belonging and competence by proposing a model of motivation coined Self Determination Theory (SDT). Their work demonstrated that in order to function optimally, an individual must feel good about oneself and utilize cognitions and emotions from within to satisfy one’s needs. When students hold an interest in learning, value their education and have confidence in their own abilities, high-quality learning is attained, including conceptual understanding and increased personal growth and adjustment.

The model is unique due to the distinction made within an individual’s intentional behaviors. Intentional behaviors can be either controlled or self-determined. Such actions are motivated and considered self-determined when the individual engages in behavior as a result of one’s own volition, as opposed to controlled actions that are compelled by force which can originate externally or internally. When a behavior is self-determined, individuals engage in choice when determining their actions which provides them with the opportunity to satisfy basic psychological needs; as a result, performance, development and motivation will be maximized.

Students’ needs for autonomy, competence, and relatedness may be maximized through offering choice, minimizing controls, acknowledging feelings, and offering information required for decision making. Educators intervening by using such
techniques may promote greater self-determinism, which results in optimal functioning at school-related tasks. When students had more self-determined motivational forms, they were more likely to stay in school than their peers who had less self-determined motivation (Deci et al., 1991). Self determinism is an important construct when considering educational reform. Learners who engaged in learning for the sake of its enjoyment and self motivation experience enhanced personal adjustment and growth (Deci et al.), promoting the likelihood of increased student engagement.

*The Power of Enriched Emotional Experiences*

While academic engagement has been identified as a key factor in student success at school (as well as in one’s world beyond the school house door), prominent researchers (Appleton et al., 2006; Connell & Wellborn, 1991; Deci et al., 1991; Skinner & Belmont, 1993) have illuminated the importance of the need to study emotions when conceptualizing engagement, pointing out a missing link regarding engagement models. Similarly, a group of researchers concurring that engagement is a multidimensional construct proposed a measure of engagement that additionally converges upon both positive (engaged) and negative (disaffected) behavior and outcomes (Furrer et al., 2006). Delineating children’s self-perceptions and autonomy as strong predictors of motivation and performance in school, these researchers hypothesized specifically about behavioral engagement in the classroom. Active participation in the classroom (on-task behavior, class participation) has been proposed to be the key element in this model, referred to as the Self-System Model of Motivational Development (SSMMD), which consists of four dimensions: behavioral and emotional engagement, and behavioral and emotional disaffection. Engagement versus disaffection in school refers to the intensity and
emotional quality of a student’s involvement in commencing in and sticking with learning activities (Connell & Wellborn, 1991; Furrer & Skinner, 2003; Skinner & Belmont, 1993). Thus, engaged students demonstrate continual involvement behaviorally along with positive emotional quality in learning tasks. Table 1 delineates sample items for each dimension (Furrer et al.)
Table 1.

*Student Engagement Versus Disaffection (Furrer et al., 2006).*

<table>
<thead>
<tr>
<th>Engagement</th>
<th>Disaffection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional</td>
<td>Behavioral</td>
</tr>
<tr>
<td>“I feel interested when we start something new in class.”</td>
<td>“I participate when we start something new in class.”</td>
</tr>
<tr>
<td>“When I’m doing my work in class I feel happy.”</td>
<td>“When I’m doing my work in class I try really hard.”</td>
</tr>
</tbody>
</table>
In conceptualizing the Self-System Model of Motivational Development as an organizational framework, this system has built upon previous works (Connell & Wellborn, 1991; Skinner and Belmont, 1993) that indicated academic engagement and disaffection actually shape children’s development (Furrer et al., 2006). Focusing specifically on active permission in the classroom and emotions in the classroom (as opposed to other contexts), all four components of engagement/disaffection noted in Table 1 were supported empirically through factor analysis (Furrer et al.). Findings supported academic achievement as being most related to behavioral disaffection, where children who reported not trying hard or pretending to work hard without actually doing so tended to have lower scores on achievement measures \((r = -.38)\). The model also found a relatively strong positive correlation between behavioral engagement and academic competence, where students who felt able in the classroom tended to report they were indeed participating actively and working hard \((r = .45)\).

The SSMMD model purported that beliefs about the self (self-system processes, or SSPs) are built up or broken down over time in response to social interactions experienced by the student. Such self-beliefs have been hypothesized to be predictors of engagement and disaffection in the classroom. This model is different from other engagement models that have promoted interpersonal relationships as critical to the concept of engagement. The current model removes the interpersonal piece from the definition of classroom engagement, while stating that SSPs are facilitators rather than indicators of engagement in the classroom. The model explains why a more supportive classroom leads to the development of positive self views that, in turn, increase classroom engagement.
The SSMMD stressed the importance of motivation to the multidimensional construct of engagement, as these researchers employed a motivational definition of classroom engagement versus disaffection that captured both positive and negative emotions and behaviors. The authors stress that disaffection and engagement are incompatible. Thus, displays of apathy, alienation and rebellion are considered patterns of disaffection and limit learning opportunities. Further, these authors agreed with colleagues (Appleton et al., 2006; Connell & Wellborn, 1991) that classroom engagement is part of a larger motivational component which may explain why many students have experienced increases in disaffection and decreases in engagement as they moved toward secondary schooling during their pre-teen and adolescent years. Because healthy emotional development rests largely upon the existence of motivated activity, especially activity promoted by our innate needs for competence, autonomy and relatedness (Connell & Wellborn; Deci & Ryan, 1985), mastery of social interaction is central to successful student engagement.

The Importance of Relatedness and the Need to Belong

The importance of relatedness has been identified as one of the main bases of motivation (Goodenow, 1993a). Relatedness addresses one’s ability to internalize the important values of others in one’s social surround (Connell & Wellborn, 1991; Deci et al., 1991). As a result of students feeling a sense of relatedness, the feeling that one belongs to school and is supported at school has lead to further motivation and engagement (Deci et al.). Relatedness encompasses one’s need to feel securely connected to one’s social environment and the need to experience oneself as worthy and capable of love and respect (Connell & Wellborn).
Relatedness is highly pertinent to student engagement, and schools attempting to foster relationships strive to have students cultivate feelings of connectedness and belonging (Vander Ark, 2002). Connectedness refers to students’ belief that adults care about individual students and their learning (Blum, McNeely, & Rinehart, 2002). Researchers have demonstrated that a sense of belongingness at school mediates student interest in school and attitudes toward education in general (Goodenow, 1992; Voelkl, 1997; Wentzel, 1996). Likewise, a sense of school belongingness increases the odds of success and persistence in school (Conchas, 2001).

Motivation theorists have suggested links between one’s psychological need for social connection and one’s achievement motives (Connell & Wellborn, 1991; Deci et al., 1991). Theory and research in the area of student attachment and belongingness have focused primarily on psychological components that are subjectively reported (Goodenow, 1992, 1993a). Belonging, as it relates to school, has been defined by Goodenow (1993b) as

the student’s sense of being accepted, valued, included, and encouraged by others (teacher and peers) in the academic classroom setting and of feeling oneself to be an important part of the life and activity of the class…it also involves support and respect for personal autonomy and for the student as an individual (p. 25).

In a study of 755 student participants from two multi-ethnic urban junior high schools and one suburban middle school, the association between student’s sense of psychological membership in their school and their academic motivation was investigated. Goodenow (1993a) hypothesized that a sense of psychological membership in school would influence motivation, and through motivation, student’s effort, participation, and subsequent achievement would be influenced.
The Psychological Sense of School Membership (PSSM) was used to measure adolescent student’s perceived belonging in school (Goodenow, 1993a). PSSM scores demonstrated a low positive relationship with expected grades in English \( (r = .36) \), while the instrument was moderately positively correlated with two different self-report measures of motivation \( (r = .42; r = .55) \). A low positive correlation was found between PSSM scores and teacher ratings of student effort \( (r = .25) \). The correlations reported by Goodenow suggested that student’s sense of belongingness in school may affect academic achievement and student effort indirectly through its influence on motivation. These results suggested much of early adolescent academic motivation may be derived from the student’s perceived support from others in the school setting.

An abundance of literature exists supporting the importance of caring relationships in the educational forum (Christenson & Sheridan, 2001; Cotton, 2001; Goodenow, 1993b; Jennings, 2003). In 2003, Jennings examined school membership and feelings of connection to school by studying 229 seventh-grade students in a diverse, urban school district in California. Using a subset of the California Healthy Kids Survey (CHKS), a self-report measure, Jennings found that as the meaningfulness of student social-emotional participation increased, so did their grade point average \( (r = .28) \). Further, students with more meaningful participation experiences also demonstrated increases in the development of caring relationships with peers and adults in school \( (r = .25) \).

According to Baumeister and Leary (1995), a belongingness hypothesis rests on the presumption that humans have an inner drive to form and preserve long-lasting, important, and supportive relationships with others. These researchers posited that a need
to belong is a basic human motivation and if the need remains unmet, one may experience severe deprivation with multiple negative effects including loneliness. People may feel lonely because their belongingness needs are not being met sufficiently. The intimacy of connectedness with significant others in one’s social network appears to protect the individual from feeling lonely (Baumeister & Leary, 1995). When applied to the learning environment, a student’s need to belong and experience close personal relationships can greatly determine academic success or lack thereof (Goodenow, 1993b).

A two-pronged model of student belongingness has been proposed by Finn (1989) to explain the importance of identity with school. Voelkl (1997) also has discussed the imperative function of identification with school. According to Finn’s participation-identification model, a student will not identify with school or value school-related goals unless the student has actively participated in school and experienced a successful learning experience. Consequently, students who do not participate experience feelings of alienation and insignificance. The antecedent of participation paired with a psychological condition—identifying with one’s school—results in varying degrees of school success or school failure.

Finn (1989) simultaneously proposed the frustration-self esteem model to explain that when active participation does not occur, unsuccessful student outcomes are experienced and create an unhealthy self-view, leading students to experience problematic behavior and reduced learning opportunities. Finn’s model represents a self-fulfilling prophecy, in that participation facilitates a successful learning experience, resulting in the student valuing school while feeling a sense of belonging; this leads to more participation, and the cycle repeats itself, yielding successful student outcomes.
Finn’s model is similar to other’s findings (Anderson et al., 2004; Voelkl, 1987) that student engagement is highly related to (a) student connection to adults and peers in the school environment and (b) experiencing successful learning that reoccurs.

A related model proposed by Voelkl (1997) suggested that the student’s failure to identify with school may be related to the physical and emotional withdrawal of a student from school. Voelkl investigated student identification with school as a construct using 1,335 eighth-graders. Students self-reported their feelings of belongingness in school and their feelings of valuing school by completing the Identification with School Questionnaire (Voelkl). A weak, positive relationship was found between identification with school and achievement (r = .07 for fourth-graders, r = .10 for seventh graders) with higher achievement associated with greater identification. Moderate positive associations were uncovered between participation and academic achievement (r = .43 for fourth graders, r = .45 for seventh graders), demonstrating that students with higher academic achievement and higher amounts of classroom participation had higher degrees of identification.

When considering feelings associated with belongingness to school, students demonstrated their sense of belonging in the study by various perceptions and feelings (Voelkl, 1997). These perceptions and feelings included feeling one was a valued member in the school community, feeling one was accepted and respected at school, sensing one was included in school, feeling pride related to being a member of the school, and including one’s school as part of one’s self-definition (Voelkl). Likewise, valuing included the awareness of the value of school as a method for personal advancement and as a social entity. Identification addressed the extent to which the
student bonded with school and incorporated it as a crucial part of one’s self concept and life. Whereas identification was a function of classroom participation and academic achievement, disidentification from school was related to a lack of participation in the classroom and repeated academic failure.

Researchers have hypothesized that relationships are seminal to achieving desired student performance (Anderson et al., 2004; Comer, 1984; Goodenow, 1993a, 1993b, Suldo et al, 2009). While attachments with teachers, administrators, and/or other significant adults at school are important for students, psychological connections are not enough; students must also participate actively in order to yield positive educational outcomes including enhancement and strengthening of the student’s inner motivation to learn (Finn, 1989).

The influence of one’s learning environment is paramount to student success. This is particularly true when at-risk high school students contemplate whether to dropout or stay in school and one’s feelings of connection are contemplated (Lee & Burkam, 2003). While strong relationships in the school environment foster student engagement, and consequently student performance, such relationships are strengthened or weakened depending on the learning environment’s structure and organization (Lee & Burkam). By investigating 190 high schools enrolling fewer than 1,500 students, these researchers found fewer students dropping out than in larger, traditional high schools. Students were less likely to leave high school when they experienced positive relationships between teachers and students. Results indicated that smaller schools (those enrolling less than 600 students) had the lowest dropout rates.
Some empirical studies have documented the effects of manipulating variables associated with building relationships at school in order to promote student success (Anderson et al., 2004; Klem, Levin, Bloom, & Connell, 2003). In the former study, Anderson and colleagues used the Check & Connect model (a process which included students individually checking in and connecting with a trained monitor for 20 months) to follow 80 elementary and middle school at-risk students. Findings demonstrated the importance of closeness and quality of relationship between students and intervention staff; warmer, high quality interactions were associated with an improvement in student behavioral engagement in the form of school attendance (Anderson et al.). Further, student-mentor relationships as perceived by the student and the mentor was a significant predictor of teacher rated academic engagement (e.g., completion of work, preparedness for class, persistence).

Similarly, Klem and associates (2003) confirmed the importance of strong relationships among school staff using a family advocate system, which parents and students referred to as First Things First (FTF). In this intervention program, three implementation strategies were used: small learning communities, instructional improvement, and a family advocate system. The family advocate system was added after the program was underway. This was due to the realization that the SLC model required a more defined approach to closing the gap between school and home in order to be supportive to students. Effective interventions such as Check & Connect and FTF were dependent on a strong foundational structure that allowed relationships to be built in an already functioning educational context. The smallness of the school was not a consideration during the implementation of such interventions.
Contributions of Attachment Theory

In his attachment theory, Bowlby (1969) demonstrated the importance of forming and keeping relationships. His contributions include the conclusion that, to grow up mentally healthy, “the infant and young child should experience a warm, intimate, and continuous relationship with his mother (or permanent mother substitute) in which both find satisfaction and enjoyment” (Bowlby, 1951, p. 417). The need for attachment has been well documented by others as well (Sroufe, Duggal, Weinfield, & Carlson, 2000). Children’s ability to form and maintain friendships and other relationships affects their social and emotional development. Early attachments are crucial in their effect on later interpersonal social skills. Children who experience poor attachment due to insecurity with their caregivers are at higher risk for later psychopathology (Cicchetti & Cohen, 1995; Sroufe et al., 2000). Comer (1984) has argued that the goal of family, society, and school is to prepare youth to function competently as adults.

It has been hypothesized that, in keeping with attachment theory, teacher-student relationships can be viewed as extensions of the parent-child relationship (Davis, 2003). Emotional bonds to parents or guardians broaden to teacher and peer relationships as well as to the school setting, which affect academic progress (Marcus & Sanders-Reio, 2001). Children’s healthy attachment to significant others and to key institutions, such as school, increases the likelihood that school will be a successful experience.

The Importance of a Personalized Education

The personalization of education has been identified as an essential component in creating dropout interventions (Christenson & Thurlow, 2004; Dynarski & Gleason, 2002). Small-school advocates have argued their schools are more successful than their
large-school counterparts because staff members are far more likely to know their students well (Cotton, 2001). As a result, teachers have been more able to know their student’s needs and interests and to provide frequent, individualized responses to student work (Oxley, 2005a). Through positive experiences, school staff may have assisted students to increase self-esteem, which in turn may have led to increased abilities to deal with stressors and challenges in a more competent manner.

Dynarski and Gleason (2002) evaluated 21 dropout programs targeting either middle school or high school students across the country to uncover the importance of understanding student academic, social, and personal problems as a means of reducing dropping out. All programs attempted to assist students in overcoming problems that interfered with their attendance. Programs also attempted to create smaller, more personal environments to help students feel more secure, with the assumption that learning could then occur more effectively. Personalization of school included reserving time during school hours for students to meet in small groups to complete academic work, meet with tutors, and meet with mentors. Also, personalization attempts included the creation of smaller alternative schools serving no more than 400 students at a time while some schools had less than 100 students in order to provide a more personalized education. During subsequent focus groups, students reported their motivation increased and they worked more to succeed because teachers pushed them to learn while caring about them as individuals (Dynarski & Gleason).

While most of the 21 programs studied did not reduce dropping out, the researchers concluded that some alternative middle school programs did create lower dropout rates; when compared with the control group of students, these middle school
students were fifty percent less likely to dropout. These programs included smaller class size, more personalized settings, more intensive counseling services, and more focused teaching and learning (Dynarski & Gleason, 2002).

Unfortunately, standardized test scores did not demonstrate increased rates of learning in this sample of students. The aforementioned evaluators found that when schools worked with students in a personalized manner (by directly addressing issues such as why the student was unhappy at school and what could be done to improve the situation at school), dropouts were reduced. Such results agree with previous researchers demonstrating that by personalizing education, feelings of student connectedness and belonging are enhanced (Connell, 1990; Goodenow, 1993, Suldo 2009) and student engagement and academic motivation are positively influenced (Finn, 1989; Furrer et al., 2006; Voelkl, 1997). A recent study (Suldo, 2009) found that students perceived their teachers as supportive when attempts had been made by teachers to connect with students on an emotional level; findings from the study underscored the importance between teacher support and adolescents’ life satisfaction.

A model proposed by Pianta (1999) to address the importance of relationships with teachers conceptualized a bidirectional component of the teacher-student relationship. Pianta purported attachment to both school and peers was required for success at school. He stated that educators and parents may mistakenly focus primarily on academic issues while missing the basic needs required for classroom success and successful school completion of social and emotional fulfillment. Pianta postulated that successful interventions used to promote stronger feelings of attachment, belongingness, and personalization may focus on methods to improve the student-teacher dyadic
relationship. Further, he suggested that other behavioral and academic interventions targeting success at school best be integrated into the classroom rather than pulling students out of class in order to promote the child’s attachment to teacher(s) and peers.

Summary and implications related to engagement. The umbrella term of engagement has been comprised from numerous theoretical bases. Attachment theory has underscored the importance of forming and keeping relationships (Bowlby, 1969; Sroufe et al., 2000), as attachment in the form of teacher-student relationships has been demonstrated to affect student’s academic progress (Marcus & Sanders-Reio, 2001). At the same time, several authors have demonstrated the importance of belonging on positive student outcomes including attendance and achievement (Finn, 1993; Goodenow, 1993a). Goodenow suggested that low or absent psychological membership (i.e., sense of belonging) in school may result in lowered engagement, diminished motivation, lower achievement, and possible withdrawal from school. Research has shown that with caring and supportive relationships at school, students demonstrated more cognitive, behavioral, academic, and affective engagement indicators during their school career (Christenson & Thurlow, 2004; Connell & Wellborn, 1991). Moreover, the personalization of education (such as creating smaller, more personal environments, reserving time during school hours for students to meet in small groups with teachers and peers) has resulted in self-reported increases in motivation (Dynarski & Gleason, 2002).

Falling under attachment theory’s umbrella, motivation theory has contributed to our understanding of student success by depicting a model based on one’s fundamental needs of autonomy, competence, and relatedness (Connell & Wellborn, 1991). When one’s fundamental needs are met, children are more engaged; when needs are not met,
children demonstrate a lack of positive emotions related to motivation such as enthusiasm, optimism, and interest (Connell & Wellborn; Furrer et al., 2006; Skinner & Belmont, 1993). Students actions related to learning are consequently affected, influencing outcomes of skill development and adjustment. By providing supportive, personalized environments, schools attempt to foster motivation amongst students. Moreover, educational practices that promote autonomy amongst students contribute to student motivation and, ultimately, student engagement. Self-determined motivation allows learners to engage in learning for the sake of its enjoyment, resulting in enhanced personal growth (Deci et al., 1991).

Much has been learned from work done by several leaders in the field of engagement. Important conceptualizations have been introduced and clarified, including the depiction of engagement as a multidimensional construct consisting of four indicator types: academic, behavioral, affective, and cognitive (Anderson et al., 2004; Appleton et al., 2006; Sinclair et al., 2003). Further, empirical evidence has demonstrated that engagement subtypes correlated with academic variables in their expected positive direction, and correlated with other variables, such as suspension, in their predicted negative direction (Appleton et al.). Therefore, interventions targeting increases in student engagement while measuring student indicator subtypes of engagement appear to be prudent for researchers. It appears that by adjusting interventions based on student response to interventions, data driven decision making will be utilized to enhance student engagement.
Small Learning Communities

Characteristics of Effective Small Learning Community Practices

Over the past four decades, many different terms have been used to describe the organization of an individual high school into a number of smaller learning units (Oxley, 2005a). During the 1960s, the terms *houses* and *schools within a school* were used. *Magnet schools* was a concept frequently discussed during the 1970s, while *charter schools, small autonomous schools*, and *academies* were ideas debated during the late 1980s and 1990s (Oxley, 2005a; Vander Ark, 2002). More recently, *small learning communities* has been a term used for describing schools which reorganize and attempt to personalize the high school learning environment (Cotton, 2001; Oxley, 2005b).

While terms may vary today (as in previous decades), houses have typically grouped 90 to 120 students with a team of teachers. Academies are varied, often consisting of themed houses, such as career academies. School-within-a-school has usually referred to a path of study focusing on a particular theme, with the school program able to act with some degree of autonomy regarding staffing, budgeting, and curriculum planning. Small autonomous schools have operated in their own buildings or as tenants in larger facilities. Ultimately, a model SLC embraces the concept that a set of individuals, including teachers, students, a principal, and a counselor, are together for at least three years. Students who enter the school in ninth or tenth grade will remain with their key staff during their high school careers within a SLC (Lounsbury, 2002).

In defining SLCs, it is important to remember that small size is not the only requirement necessary for successful SLCs (Fine, 1998; Oxley, 2005a), although small size provides the conditions necessary for focus on students. In addition, however,
teachers must be collaborative, interactive, and trained in state-of-the-art teaching practices. Unfortunately, key structural elements required for effective SLCs have been consistently lacking in programs across the country (Oxley, 2001).

While standards for implementing SLCs have not yet been formally defined, existing SLCs that have reportedly demonstrated positive effects on student performance hold common features. As Oxley (2005a) noted, current research has not evaluated the independent effect of particular SLC practices on student outcomes. Educational practices in SLCs seem interdependent; researchers have not yet siphoned out specific practices that lead to student success. Rather, multi-component interventions have likely produced impressive student results claimed by educators (Cotton, 2001; Oxley).

Definitions of small learning communities can be confusing because they continue to be vague and nondescript. Educators usually agree that a small learning community is a separately defined learning unit targeting individuals within a larger school setting. Students and instructors are scheduled together and often designate a particular area of the school in which to hold most or all of their classes (Sammon, 2000).

Oxley (2005a, 2005b) provided an SLC implementation model promoting seven research-derived best practices, summarized in Table 2.
Table 2.

Oxley’s (2005a, 2006) Model for SLC Implementation

<table>
<thead>
<tr>
<th>Seven key organizational strategies(^a)</th>
<th>Implementation recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small size(^b)</td>
<td>The SLC is comprised of a few hundred students</td>
</tr>
<tr>
<td>Duration(^b)</td>
<td>Some hours each day are spent in the SLC</td>
</tr>
<tr>
<td>Continuity(^b)</td>
<td>At least two years of study occurs in the SLC</td>
</tr>
<tr>
<td>Parents as partners(^b)</td>
<td>Teams ensure collaboration with parents</td>
</tr>
<tr>
<td>Community(^b)</td>
<td>Parents and community organizations are active partners</td>
</tr>
<tr>
<td>Teaming(^b)</td>
<td>Teams of teachers share the same students</td>
</tr>
<tr>
<td>Personalization(^b)</td>
<td>Collaboration occurs in the same space</td>
</tr>
</tbody>
</table>

\(^a\) The model did not address the importance of quantitative assessment.

\(^b\) Strategies associated with belongingness (perceived connection).

Interestingly, Oxley’s model depicts practices that stem from engagement theory and attachment theory, as strategies appear to be anchored by attempts to strengthen a sense of belonging and community attachment. Similarly, Oxley created a Best Practices Checklist (Oxley, 2005b, 2006) to document practices reported by many SLC proponents to be effective. Strategies included using counselors as important members of the SLC team, including special education staff and English Language Learner staff as key members of the SLC team, tailoring instruction to meet the needs of diverse learners, and ensuring that access to the SLC is equitable for students by eliminating admission criteria and random assignment of students.
Cotton (2001) also has identified essential elements of small learning communities. Cotton’s model includes many similarities when compared to Oxley’s model (2005b, 2006), most notably by including recommendations posited by researchers and theorists in the engagement literature arena. Both models are illustrative of the multi-faceted foundations that are necessary for successful student outcomes. Cotton promoted the following program and student goals: self-determination, identity, personalization, support for teaching, and functional accountability. While Table 3 identifies Cotton’s model of common SLC essential elements and goals, specific details and definitions related to Cotton’s model may be found in Appendix A.
Table 3.

*Essential Elements of Small Learning Communities (Cotton, 2001)*

<table>
<thead>
<tr>
<th>Program/Student goal</th>
<th>Essential elements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self determination</td>
<td>Autonomy, separateness/distinctiveness, self-selected students and teachers, flexible scheduling</td>
</tr>
<tr>
<td>Identity</td>
<td>Vision/mission, thematic focus, focus on student learning, detailed planning</td>
</tr>
<tr>
<td>Personalization</td>
<td>Knowing students well, heterogeneity/non-tracking, keeping groups of students together, parent/community involvement</td>
</tr>
<tr>
<td>Support for teaching</td>
<td>Leadership/decision making, professional development and collaboration, integrated curriculum and teaching teams, large repertoire of instructional strategies</td>
</tr>
<tr>
<td>Functional accountability&lt;sup&gt;a&lt;/sup&gt;</td>
<td>Multiple forms of assessment, accountability/credibility, support from districts, boards, and legislators, networking with other SLCs, thorough implementation</td>
</tr>
</tbody>
</table>

<sup>a</sup> Specific recommendations for gathering and interpreting quantitative data were not provided in the model. Instead, vague descriptions of informal evaluation were noted.

Similar to the aforementioned models focusing on SLC practice, Fine (1988) has identified six key features that characterize small learning communities. Fine’s collaborative work with Chicago’s Small Schools Coalition led to the following features: (1) small size with no more than 350 students at the elementary level and 500 students in high schools; (2) a cohesive, self-selected faculty; (3) autonomy; (4) curricular focus that provides continuous educational experience; (5) inclusive admissions; and (6) positive academic and behavioral change being observed.

*Issues related to SLC size.* Interestingly, Fine’s (1988) model mirrors several common best practices in education and overlap amongst various descriptions of SLC
models. Further, most features identified are not necessarily limited to exist only amongst small schools. Fine has cautioned, “While not all small schools are good, it is very hard for big schools to be anything but disappointing” (p. 4). When asked about size, SLC proponents have provided varying opinions. While successful SLCs have commonly held no more than a few hundred students (Fine, 1998; Oxley, 2005b), some very successful SLCs have held approximately 100 students (Ancess, 2003). Large high schools have shown less association with favorable student outcomes than have their smaller counterparts (Cotton, 2001; Lee & Burkam, 2003), and 400 students comprising an SLC has not been as optimal as 200 (Oxley, 2001). In smaller schools, students have been more likely to attend, less likely to drop out, and more likely to feel a sense of personalization toward their school (Lee & Burkam; Lindsay, 1982). In addition, small high schools have more often reduced the often-found achievement gap between students of color and non-minority students (Lee & Smith, 1995).

Generalizations pertaining to size and other SLC practices can be detrimental, and indeed SLC proponents must be careful when making global statements. A review of the SLC literature uncovered that there are many good small and large schools, and there are also many bad small and large schools. While size can be an important factor, the reduction of school size as a key intervention pales to other school restructuring effects that have been based on high quality educational practices (Lee & Smith, 1995).

While SLC key elements have been comprised of educational practices that are admirable, educators have continued to develop and operate many different kinds of SLCs (Cotton, 2001). Such practices have upheld the uniqueness of individual programs yet have lacked consistency in implementation and practice. This may have led to mixed
results that compromised the reputation of SLCs. Evidence thus far has demonstrated there is not a single or unique model for creating SLCs (Sammon, 2000). Various implementation methods have been as unique as the schools that have sponsored each SLC.

Many SLC advocates have held that the key SLC feature for successful outcomes is an interdisciplinary teaching team that shares no more than 500 students for the majority of their instructional time (Oxley, 2001). Further, advocates claimed that the physical space of the SLC must be dedicated to student-teacher collaboration. Finally, advocates report that it is crucially important teachers possess the abilities to learn the needs and interests of their students while providing them with periodic, individual responses to their work (Oxley, 2005a).

The amount of daily time students should spend in their SLCs has been debated (Oxley, 2005a). Firm believers in “pure” SLCs advocate for an entire student’s day within the learning community (Fine, 1998). Such practices aim at providing teachers a degree of independence and flexibility while enhancing student’s sense of community. Researchers have demonstrated that by spending a half day in one’s SLC, positive effects are realized for student’s sense of community and academic achievement (Felner et al., 1997; Oxley, 1990, 1997, 2005a). While educators have tried to improvise by spreading this half-day equivalent across the entire school day, such practice has reportedly lessened the impact regarding a sense of community among SLC members (Oxley, 2005a).

Students remaining in their SLC for at least two years have been more likely to show positive gains from SLC structures (Oxley, 2005a). Connections have been formed
between students of differing grade levels, particularly competent upperclassmen and inexperienced younger students, which enhance learning (Fazio & Ural, 1995). In addition, teachers have been more easily able to enhance their student’s knowledge from one year to the next in such models (Oxley, 2005a).

Family and community involvement has been foundational to SLCs. A broad collaborative base has resulted in creating unique learning opportunities for students, while expanding knowledge for both staff and students (Oxley, 2005a). Likewise, effective communication, consisting of ongoing relationships between schools and families, has yielded better outcomes for students (Christenson & Sheridan, 2001).

Another important facet of successful small learning communities rests with the issue of who attends the SLC. Successful SLCs have consistently allowed for student admission based upon a common focus or mission, rather than on rigid criteria such as test scores and grades (Oxley, 2001). Teacher and staff employment in the SLC has also been best determined by one’s mission or focus, not by seniority or other such rankings used by many schools.

*Summary of SLC practices.* Several school reform models aimed at creating successful SLCs have been proposed, but a well established evidence base has yet to be demonstrated. While best practice dictates that before succumbing to large-scale use of educational programs such as SLCs empirical evidence must be demanded (Ellis, 2005), such evidence has not been portrayed by the SLC literature. By reviewing the SLC literature, the principal investigator uncovered anecdotal studies rich with interventions and reportedly positive outcomes, yet the efficacy of SLCs across the country has not
shown a well established evidence base. The studies reviewed in the next section have assisted in building the foundations of the educational innovation referred to as the SLC.

*The Reality of SLC Implementation*

It is unfortunate and unsettling that research on SLCs has not yet demonstrated sound methodologies using experimental or quasi-experimental design by randomizing assignment of students to treatment and control groups, or comparison group methodology by using a sample of students in regular high schools with similar student characteristics to schools implementing an SLC model. Instead, SLC research has relied primarily on anecdotal reports claiming remarkable results. Consequently, though there are not existing empirical studies examining SLCs (Oxley, 2005a), several efforts appear noteworthy since they examined the effectiveness and development of small learning communities. These efforts have been summarized below and must be regarded cautiously, as SLCs have provided only anecdotal reports without empirical evidence to support their efficacy.

Several SLCs were examined for commonalities in their approaches to providing a personalized environment as a means of enhancing student performance (Allen, 2000; Almeida, 2000; Cushman, 2000a, 2000b; DeSalvatore, 2000; Malarkey, 2000). Table 4 delineates a summary of findings from this comparison. While hopeful, much of the data has been qualitative in nature, while quantitative data, such as grade point averages and national standardized test scores, has been sparsely reported.
Table 4.

*High Schools: A Review of Six Small Learning Communities in the United States*

<table>
<thead>
<tr>
<th>SLC</th>
<th>Summative/formative evaluation</th>
<th>Ongoing concerns</th>
<th>Basis of research</th>
</tr>
</thead>
<tbody>
<tr>
<td>Landmark High, New York</td>
<td>Student portfolio, student cooperation, organization, focus, at least a minimal grade for all senior institute courses, attendance rates, graduation rates</td>
<td>Students not ready for new rigorous statewide tests; Landmark applied for exemption status for statewide tests</td>
<td>Anecdotal</td>
</tr>
<tr>
<td>Oakland Tech, California</td>
<td>Senior project, student portfolio, graduation rates</td>
<td>Dramatic improvement in student’s achievement has not yet been proven</td>
<td>Anecdotal</td>
</tr>
<tr>
<td>Brighton High, Boston</td>
<td>Senior project, student portfolio, graduation rates</td>
<td>Continuous challenges related to transition from small, successful programs to larger implementation models</td>
<td>Anecdotal</td>
</tr>
<tr>
<td>SLC</td>
<td>Summative/formative evaluation</td>
<td>Ongoing concerns</td>
<td>Basis of research</td>
</tr>
<tr>
<td>---------------------</td>
<td>-----------------------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>Putnam High, Oregon</td>
<td>Specific number of credits required, pass Oregon statewide tests, earn proficiency on classroom work samples, earn mastery certificate, complete a career experience</td>
<td>The school sees itself as a work in progress with much to accomplish.</td>
<td>Anecdotal</td>
</tr>
<tr>
<td>Sir Francis Drake, California</td>
<td>Student portfolios, Scholastic Assessment Test results, Golden State Exam (GSE) results, grade point averages</td>
<td>Grade point averages are steadily rising and GSE results show improvements, but SAT scores remain flat with downward verbal trends</td>
<td>Anecdotal</td>
</tr>
<tr>
<td>SLC</td>
<td>Summative/formative evaluation</td>
<td>Ongoing concerns</td>
<td>Basis of research</td>
</tr>
<tr>
<td>------------</td>
<td>-----------------------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Quest High, Texas</td>
<td>Pass Texas Assessment of Academic Skills (TAAS) or State Department tests, assignments must meet Quest Quality of .80, Senior exhibition, graduation rates</td>
<td>Student population is below 200, demonstrating an inability to consider widespread implementation. The school’s curriculum is not aligned with state testing demands</td>
<td>Anecdotal</td>
</tr>
</tbody>
</table>
To ultimately inform implementation models regarding SLCs, proponents of SLCs must conduct rigorous research with experimental controls. Proven effectiveness for SLCs remains unclear despite the various studies noted in Table 4. Although each program has touted positive differences in student outcomes, the evidence presented remains unconvincing due to inadequate research design. While the schools in Table 4 reported success in a small-program design, problems arose in methodologies used to measure outcomes of SLCs. For example, one school reported parental satisfaction to be high without evidentiary data. When reflecting on program results, the author noted, “Although we do not conduct parent surveys, teachers report that parent satisfaction appears very high, especially regarding the school’s size and safety” (Cushman, 2000a, p. 74).

Unfortunately, similar methodological problems appear to be prevalent throughout the SLC literature. For example, the Landmark School in New York City (Cushman, 2000a) reported success by documenting that approximately 80% of seniors attend college directly after graduation, while other seniors planned to enroll during the following spring. Other graduates enrolled in vocational training or the military, or entered into the workforce immediately after graduation. Since Landmark’s 1993 start, its founders reported their main objective has focused specifically on the personalization of high school. The program has targeted the formation of personal connections among teachers, students, and families in order to let children know they truly matter. However, actual methods of measuring student feelings of personalization such as survey administration, student interviews, and focus groups have neither been mentioned nor suggested.
Landmark has reported that students have forged connections to the community through service learning and research projects, forming a strong network for all involved (Cushman, 2000a). While many of Landmark’s students are from families where English is not spoken in the home, students have reportedly overcome many challenges associated with this upbringing. For example, 91.7% of students taking the State Board of Education’s Regents Competency Tests in math passed the exam. Yet Landmark, along with the other SLCs comprising Table 4, has struggled to produce data using rigorous methodological research.

In addition to the SLCs identified in Table 4, several other SLCs have been given attention for successful outcomes without appropriate evidence. One study that focused on the transformation from large schools to small learning communities in Chicago examined the relationship between small schools and student achievement (Wasley et al., 2000). Small schools were defined as those serving less than 350 students, and in Chicago, such schools targeted impoverished neighborhoods and more students of color. Since the schools studied were usually newer schools that were not yet stable, caution must be used when interpreting results. Results indicated that in comparison to larger schools in the system, students in smaller Chicago Public Schools missed fewer school days on average (9.42 days in smaller schools versus 13.56 days in larger schools) and had lower mean dropout rates over a one year period (7.82 dropouts in smaller schools versus 10.30 dropouts in larger schools). Mixed results were reported regarding academic achievement; elementary students attending small schools tended to have lower math and reading achievement levels than their peers in larger schools, while high school students
in smaller schools outperformed their peers in large schools in reading but lagged behind in math.

Methodological concerns were evident when reviewing the Chicago Public School results; academic achievement was reported as grade equivalents, which are known to be imprecise, unequal units that should not be used to make mastery decisions. Yet the information derived from Chicago Public Schools has provided at least some quantitative data regarding the SLC model.

When examining other SLCs across the country, promising results were indicated by three SLCs at the high school level; these schools reported successfully narrowing the achievement gap between minority students and their White counterparts (Noguera, 2002). Students at three small schools (Far West High School in California, Snowden High School in Massachusetts, and El Puente Academy in New York) reportedly outperformed students who were enrolled in their associated school district’s larger high schools on standardized tests. Unfortunately, specific quantitative data comparing the large-school and small-school achievement scores were not provided in the literature. The information provided demonstrated no indication of being generated by imposing manipulations on variables (as required for experimental studies), but instead consisted of merely anecdotal evidence. The author conceded this lack of empirical research when he noted the available research “is not as detailed or systematic as it should be” (Noguera, p. 61), yet indicated there were several significant findings that may help educators in their quest for SLCs. Specifically, each school enrolled fewer than 200 students, embraced a clear mission supported by parents, teachers, and students, and ensured teachers were skilled and knowledgeable in their subjects while simultaneously knowing how to
encourage their students to take responsibility for their own learning. Yet no evidence was presented to document the strength of teachers’ knowledge in their subject area, while no information was presented addressing teacher’s abilities to encourage students.

Other SLC reports similarly lacked empirical data, such as a report on the Metropolitan Regional Career and Technical Center in Providence, Rhode Island (The Met High School; Levine, 2002). Administrators in this center did not set a specific content standard, believing that uniform standards were not realistic. Instead, rubrics based on various internal values of staff, such as being a life-long learner and a good neighbor, were used to evaluate student accomplishments. Levine lamented that because the Met’s administrators used rubrics as the evaluation method for student progress, federal mandates for meeting student achievement were not adequately addressed. The anecdotal findings could not provide sound, empirical evidence of student gains, which continues to be a problem for SLC outcome data. Quantitative results stemming from research designs with sound methodology are critically lacking at the Met.

Not surprisingly, the clash of educational reformers and public policies has often been felt when educators implement the SLC model. Although many SLC proponents are convinced of the value of using student portfolios, presentations, rubrics, and postsecondary reports of success to review and document student accomplishments, schools may be forced to spend more time in addressing accountability systems that prize state and national testing results (Levine, 2002).

In Boston, educational reform resulted in the creation of the Boston Pilot Schools (Tung, Ouimette, & Feldman, 2004). Consisting of 13 different schools within the Boston Public Schools (with enrollments similar to the makeup of the district’s student
population), the Pilot Schools have created small communities of learning and have reportedly met student’s academic and emotional needs (Tung et al., 2004). The Pilot Schools have been reported to be among the district’s top schools in terms of student attendance, graduation, and percent of college-bound students. Researchers are reportedly in the process of empirically testing such efficacy under more controlled conditions. Clearly, caution must be stressed when educators undertake the tasks of implementing and evaluating an SLC. As demonstrated by Oxley (2005a), many school districts have failed in their attempts to implement SLCs due to poor treatment fidelity, lack of funding, resistance to change, poor research design, and failure to implement SLC key components.

Closer to home, the Minneapolis Public School’s (MPS) high schools began their attempt to implement SLCs within seven comprehensive high schools approximately five years ago (Johnson & McCauley, 2002). While many MPS graduates were noted to be equipped for further education and work, nearly 50% of those who entered MPS in grade nine did not graduate four years later. With such grim statistics in mind, a document entitled the Platform of Principles and Practice (Johnson & McCauley) was developed to address high school transformation. Specifically, small personalized learning communities became the central focus of the platform due to lead administrators’ support for academic success and healthy development of students, a key tenet of the SLC.

Academically, the Platform of Principles and Practice (Johnson & McCauley, 2002) strived for high expectations and rigorous academic achievement referenced in the SLC literature. It also aimed to increase levels of student engagement and successful transitions beyond high school. Because SLCs have claimed to promote the sense of
belonging needed by young people in order feel ownership and motivation, Minneapolis school leaders stated,

Educators who establish firm boundaries, foster warm personal relationships in the classroom, and enable students to have an impact on their environment strengthen student’s interest in their learning. This sense of belonging helps students because they feel connected. Small learning communities in Minneapolis are established to foster this connectedness (Johnson & McCauley, 2002, p. 3).

With a sense of urgency, the superintendent of MPS and her cabinet promised to offer SLCs to all high school students attending a comprehensive high school. Further, the superintendent noted, “We will limit the size of small learning communities to approximately 150 students per grade level” (Johnson & McCauley, 2002, p. 5). Also promised were the following: ensuring every student is known well by every member of the staff in the SLC; providing common, school-wide core academic standards and expectations which are implemented within the SLCs; assuring integration of special-needs students and English Language Learners into SLCs; implementing a student advisory system to ensure personalized guidance for students and families; and supporting each student in the development of a personal plan for high school and for future education and work after graduation.

Minneapolis Public Schools embarked on its mission to implement SLCs by receiving a federal SLC implementation grant in 2002. After two years of planning and three years of implementation, a formative evaluation study of Minneapolis Public Schools’ SLCs was conducted (Dvoracek, 2005). A summary of progress for all seven high schools noted both successes and non-successes, depending on the site. While some
schools were found to have increased student’s perceived personalization as self-reported on student surveys, other schools were struggling with personalization.

A particularly troublesome issue was uncovered relating to program selection criteria (Dvoracek, 2005). Optimally, SLCs strive for equity and draw from a diverse group of learners, but a few Minneapolis high schools with large numbers of families from higher SES levels than the district’s average imposed entrance criteria based on academic scores (i.e., grades and national exam scores). Other problems included a lack of advisories in some schools, large numbers of students in some SLCs, and lack of funding. Furthermore, promises made in the district’s Platform of Principles and Practice (Johnson & McCauley, 2002) remained unmet; the size of SLCs were not limited to 150 students per grade level, advisory programs were instituted in only two of the seven comprehensive high schools, special-needs students and English Language Learners were not integrated into small learning communities, nor were personal plans consistently developed for students during and after high school.

While Dvoracek’s (2005) report identified strengths and weaknesses within Minneapolis SLCs, limitations of the study should be noted. First, the evaluation took place during the summer when school was not in session. As a result, only one site visit occurred per school during student hours prior to the commencement of summer vacation. Further, SLC lead staff were difficult to reach because many were out of town. While the evaluation provided some information to the district about its SLCs, further evaluation is warranted in order to provide the district with more specific information about the condition of its SLCs. Of note in Dvoracek’s evaluation was the school district’s goal to increase academic rigor. This was an admirable goal, but in order to
increase academic rigor for students, personalization and social support must be increased. If this does not occur, students will not feel safe enough to take risks required for learning (Lee & Smith, 1997).

In 2006, the MPS district identified its primary goal of the implementation model as “closing the achievement gap between students of color and white students in reading and mathematics while raising the achievement of all students” (Bradley, 2006, p. 2). Results indicated that during the 2005-06 school year, the district met its objective of increasing the percentage of high school students on-track to graduate by 3% from the previous school year. Additionally, the district increased retention in its SLCs by 2% from the prior school year. The majority of these increases occurred in students of color and in students who qualified for free and reduced lunch.

While such results are promising, the district has continued to struggle with issues of inequity across its SLCs (Bradley, 2006). For example, as recipients of a 2005 federal grant focusing on the implementation of SLCs, the district’s funds were temporarily frozen by the United States Department of Education’s Office of Vocational and Adult Education (OVAE) due to the district’s reliance on entrance criteria in some of its SLCs. Interestingly, the allocated funds were put on hold in March 2007, and in April 2007 all entrance criteria for SLCs were abandoned. Funds were reinstated by OVAE shortly thereafter (Bradley, 2006). Needless to say, Minneapolis has experienced growing pains as it has continued to refine its implementation and evaluation of small learning communities. Similarly, SLCs across the country have experienced issues related to problems with conceptualization of the SLC itself.
Conceptual Concerns Related to SLCs

Educators and investigators continue to struggle with complicated conceptual issues related to the small learning community. It would seem reasonable to propose that conceptual guidelines are in order to promote consistency in program planning and program implementation efforts. For example, problems in defining SLCs and the key concepts required for SLC success result in confusion. This leads to compromises in implementation efforts as well as roadblocks to conducting rigorous research. By resolving conceptual issues, the educational field will be more equipped to decide what key issues should be a focus of future study when considering SLCs.

A need for terminology and criteria. Should SLCs continue to be implemented across the country, the possibility of classifying SLCs according to specific criteria may serve as a solution to the wide continuum of programs that claim to be effective SLCs. By using standards to define SLCs, a more common terminology with explicit variables will prove useful by providing clarity to the SLC concept. In addition, such clarity may result in an agreed upon choice of dependent variables when evaluating SLCs. The purpose of SLC research may then become more scientifically based due to congruency on conceptual issues.

Conceptual clarity may be thwarted due to strong allegiances. A common concern among many educational reformers includes the issue of student needs. For example, motivation, a sense of belonging, and the value of an education are important and necessary for positive student outcomes (National Research Council Institute of Medicine, 2004). School reformers have been known to mistakenly prevent progress toward their mission because they tend to become associated with their specific view, or
claim, as a means of solving problems often associated with large, impersonal schools (Ellis, 2005). Simultaneously, these stakeholders make claims while associating themselves with various educational programs such as SLCs, charter schools, alternative schools, engaging schools, themed schools, etc. It would seem reasonable to propose that the effective components of educational programs drive outcomes for secondary students, rather than the type of program. Previous research and educational practices have demonstrated that when educators become tangled in which specific educational innovation they are going to follow, conceptual issues become lost and personal stances emerge (Ellis).

*Inconsistent implementation affects conceptual clarity.* Conceptual issues have become more evident when considering school restructuring because educators have tended to disagree on what changes need to be implemented. The SLC model, in various forms, has been implemented across the country in America’s schools. Like any educational innovation working towards educational reform, SLC outcomes are highly dependent on the resources that go into program planning and program implementation. Unfortunately, one can label a school or program as being an SLC, but the term has not been defined clearly enough to state that SLCs have consistently promoted educational best practice. Such crucial conceptual issues thwart the ability to make objective decisions regarding SLC success.

To further complicate differences related to implementation practices, it has appeared that the specifics of local practice have been central in making an SLC accomplish its goals. At the same time, best practices regarding SLCs have been difficult to arrive at, let alone standardize (Oxley, 2006). Due to the uniqueness of each SLC,
replication in other schools may be confusing and difficult. Perhaps what is needed is the conceptualization of a basic, minimal description of a model SLC that supports educational progress. This model might include evidence-based curricula, staff selection, small teacher/student ratios, and other hallmarks of successful small learning communities (Oxley, 2006).

While guidelines have been established for SLC implementation, so far researchers have not identified specific components of SLC implementation that may lead to student success. Instead, multi-component interventions may have produced reported successes regarding SLCs. Unfortunately, such interventions and SLC programs have been vague and lacked description of specific practices. Moreover, many practices suggested for SLCs have also been suggested for most high schools across the country: parents being welcomed as partners, students being shared by common teachers, instruction being tailored to student needs, accountability, team building, and educational personalization (Cotton, 2001; Fine, 1988; Oxley, 2005b). SLC proponents have not identified which practices have been effective and which practices have not had an effect.

**Summary and implications related to small learning communities.** Unfortunately, it appears that educators have not been able to agree on a solid definition of the SLC because of a lack of consensus regarding effective and empirically successful practices. A strong theoretical base has been utilized by SLC proponents, with roots based primarily on engagement theory, attachment theory, and motivation theory. Yet SLC proponents have not provided the research community with a strong empirical base to warrant widespread implementation. SLC proponents have failed to provide empirical evidence and have continued to rely primarily on anecdotal evidence.
Multiple SLCs have been investigated in this literature review. While the programs identified sound promising, outcomes presented have been qualitative in nature with anecdotal data. Many parents and educators have continued to take great pride in their particular SLCs, but empirical evidence has not been provided to support significant gains for students. Problems surrounding conceptual issues have been raised, including a lack of common terminology and classification. Finally, educators must interpret results cautiously when student improvement has occurred, as student success may be due to other factors rather than due to SLC implementation.
CHAPTER 3

Method

Participants

Participants were 100 tenth grade students (46 males and 54 females) from one large urban high school in a Midwestern city during 2005-2007. All students were enrolled in one of three SLCs (A, B, or C) during their entire ninth grade year. By the beginning of tenth grade, SLC C no longer existed since its entire student body was reassigned to either SLC A or SLC B to join peers who had been enrolled in SLC A or SLC B since ninth grade. When in tenth grade all participants in this study were enrolled in either SLC A or B. The students who transferred from the discontinued SLC C into either SLC A or SLC B comprised this study’s transfer group. Students who had always been enrolled in SLCs A or B for two consecutive years comprised the continuously enrolled group. Consequently, the transfer group was the result of a naturally occurring incident (i.e., the discontinuation of SLC C).

The study’s sample size was limited because during the 2005-2006 academic year 73 students comprised SLC C. Furthermore, twenty-three students did not return for their 2006-2007 sophomore year due to attrition including family relocations, student transfers, and in one case, student pregnancy. Therefore, the final sample size of the transfer group (N = 50), while limited, allowed the evaluator to capture a majority of students (68%) who had been originally enrolled in the less highly functioning SLC. For comparison purposes, an attempt was made to conduct a match comparison. This was done in order to find a representative sample of 50 students from the continuously enrolled group with 50 students from the transfer group using a stratified random sampling procedure. First, the
transfer group was arranged by SLC assignment (SLC A or SLC B). Then, the transfer
group was arranged into three key strata: (a) ethnicity (African American, American
Indian, Asian American, Hispanic, and White), (b) Free/Reduced Price Lunch (FRL)
eligibility, and (c) English Language Learner (ELL) status. Next, using a common
statistical package (SPSS) random selection procedure, students in the continuously
enrolled group were randomly and proportionally selected based on the desired stratum.

Since the ethnicity variable contained extreme disproportions between the transfer
and the continuous groups, the matching procedure was necessarily disproportionate in
order to secure proportions as close as possible on the SLC group/ethnic variable. Thus,
minority status was balanced by matching more continuously enrolled students of color
who had originally attended SLC A or SLC B than white students. In addition, since it
was desirable to have equal numbers of students in each group, students were randomly
removed from the continuously enrolled group until it matched the transfer group in
sample size. This resulted in producing 50 participants in each group for quantitative
research analysis (N = 100). Table 5 displays the demographic breakdown of the two
groups prior to being stratified and after stratification occurred. From the table one can
observe that despite attempts to match the groups, they remained disproportionate to one
another, although less than originally.
### Table 5.

*Grade 10 SLC Transfer Group and Continuous Enrollment Group Demographics*

<table>
<thead>
<tr>
<th></th>
<th>Transfer Group</th>
<th>Continuous Enrollment Group</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Before stratification (n=100)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students of Color</td>
<td>81%</td>
<td>31%</td>
</tr>
<tr>
<td>Free/Reduced Lunch</td>
<td>74%</td>
<td>21%</td>
</tr>
<tr>
<td>English Language Learners</td>
<td>14%</td>
<td>3%</td>
</tr>
<tr>
<td><strong>After stratification (n=100)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students of Color</td>
<td>81%</td>
<td>68%</td>
</tr>
<tr>
<td>Free/Reduced Lunch</td>
<td>74%</td>
<td>28%</td>
</tr>
<tr>
<td>English Language Learners</td>
<td>14%</td>
<td>8%</td>
</tr>
</tbody>
</table>

In addition to the students noted above, a subset of student participants from each group was interviewed for qualitative data gathering purposes (N = 31). Student interviews were administered in one-to-one, private sessions during the last week of school. The school’s administration limited the number of students allowed to participate to 60. Therefore, 60 students were randomly selected for interviews (30 students from each SLC group). As expected, not all 60 students were available to meet with interviewers. A total of seven students had transferred or moved out of district, five
students were absent, and four students declined participation. This left 44 students available for interviews; 20 from the transfer group and 24 from the continuous enrollment group. Interviewers followed the order of the randomly-generated list of student names to interview available students. At the end of interview week, 31 students had been interviewed, resulting in a sample size of 16 students from the continuously enrolled group and 15 students from the transfer group.

In addition to student participants, two groups of teachers/staff completed a survey for the study. These participants had either previously taught in the defunct SLC C during 2005-2006, or had taught in SLC A or B during that time. Twenty-three teachers/staff were identified as having previously taught in SLC C. They were asked to provide confidential information and opinions related to their school’s discontinued SLC using a survey designed for the study. Of these teachers/staff, 13 completed the survey, representing approximately 57% of members from the historical SLC C. Those who did not complete surveys included one teacher/staff that explicitly declined participation and nine remaining adults who failed to return the questionnaire in spite of follow-up by researchers.

Likewise, 19 teachers/staff from SLC A or SLC B during 2005-2006 were identified and asked to complete the survey. Of these teachers/staff, 10 completed the questionnaire, representing approximately 53% of group members. Of the remaining nine teachers/administrators, two explicitly declined participation, one was on medical leave, and six failed to return the questionnaire in spite of follow-up by researchers.
Materials

Data Source. To answer both research questions, a database created by one school district’s Research, Evaluation, and Assessment Department was used. Data were provided for student subjects enrolled in small learning communities during their ninth and tenth grade academic years spanning 2005 to 2007. The data set included students’ grade point averages, attendance records, and demographic information, all supplied by the school district. The data set was augmented with student survey responses, student interview responses, and teacher/staff survey responses collected during the current study. Retrospective data, historical data, and current data were used for the study.

The SLC Student Engagement Survey (SLCES). Measures of cognitive and affective engagement were initially obtained from items on the Student Engagement Instrument (Appleton et al., 2006), a 35 item self-report survey completed with paper and pencil. Appleton and colleagues constructed the survey after conducting a thorough review of the cognitive and affective engagement literature. Items in the instrument were either adapted from past measures or created from relevant research findings (Appleton et al.). A confirmatory factor analysis on 53 items demonstrated that a six factor model provided the best fit with the data: teacher-student relationships, peer support, and family support for learning served as indicators of affective engagement, while perceived control/relevance of school work, extrinsic motivation, and future aspirations and goals served as indicators of cognitive engagement. Remaining items were dropped and the final instrument consisted of 35 items. Coefficient alphas ranged from .72 to .88 for cognitive engagement and psychological engagement factors (Appleton et al.).
A modified instrument, the SLCSES (see Appendix B), used a five factor model because the sixth original factor of the SEI, extrinsic motivation, consisted of only two items despite a high alpha coefficient (Appleton et al., 2006). Therefore, the sixth factor was dropped from the SLCSES. While extrinsic motivation is relevant to SLCs, other methodology in the current study addressed autonomy, which is relevant to external motivation. Another modification occurred on the SLCSES after the principal investigator was advised to add two items as potential indicators of validity. This was done to determine whether students were paying attention to the survey due to its retrospective design (M. Harwell, personal communication, March 7, 2007). Attention was particularly a concern because each student was asked to provide answers to questions based on two different academic years: questions first inquired about information based on the current school year and then asked for retrospective information regarding the previous school year. As a result, the new validity items asked students to respond to the following items: “When asked to fill out a survey, I will pay attention and answer each item;” “When asked to complete a survey like the one I am working on right now, I will give it my best effort.” Thus, the final modification to the instrument was made by asking students each item twice, or retrospectively.

In the current study, the internal consistency measured by Cronbach’s $\alpha$ using the SLCSES ranged from .67 to .83, as noted in Table 6. SLCSES alpha coefficients were not as robust as the original SEIs alpha coefficients ranging from .72 to .88 (Appleton et al.), which must be considered when interpreting data. The SLCSES did not reduce the number of items from the original instrument, as a reduction of items would likely result in reduced reliability.
Table 6.

Internal Consistency (Cronbach’s $\alpha$) For SLCSES Subscales in the Current Study

<table>
<thead>
<tr>
<th>Variable of Interest</th>
<th>Ninth grade</th>
<th>Tenth grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher-student relationships</td>
<td>.77</td>
<td>.83</td>
</tr>
<tr>
<td>Peer support for learning</td>
<td>.67</td>
<td>.72</td>
</tr>
<tr>
<td>Family support for learning</td>
<td>.76</td>
<td>.69</td>
</tr>
<tr>
<td>Control and relevance of schoolwork</td>
<td>.79</td>
<td>.74</td>
</tr>
<tr>
<td>Future aspirations and goals</td>
<td>.78</td>
<td>.67</td>
</tr>
<tr>
<td>Validity items (2)</td>
<td>.82</td>
<td>.81</td>
</tr>
</tbody>
</table>

The SLCSES was piloted on approximately 10 ethnically diverse tenth grade students randomly selected from a district high school other than the high school involved in the current study. Following the pilot administration, students were interviewed and did not report difficulty with the instrument’s directions or items. Based on the pilot study, changes were not made to the instrument.

The Student SLC Interview. The Student SLC Interview (Bemel, 2007) was developed for this study (see Appendix C). The SSI was built on intrinsic motivation theory, in which numerous researchers conceptualized that students’ needs for autonomy, competence, and relatedness ultimately affect student performance (Connell & Wellborn, 1991; Deci, Vallerand, Pelletier, & Ryan, 1991; Skinner & Belmont, 1993). The creation of the SSI also stemmed from literature on engagement theory. Unlike other instruments used in this study, the SSI used a series of open-ended questions. By asking open-ended questions, subjects may tell the interviewer more about what is considered to be
important while having maximum latitude to speak freely (Badger & Thomas, 1992). It was hypothesized by the investigator that student’s perceptions of school may be more readily accessed during private interviews, and that a less structured question format may provide other data that may have not otherwise been captured. Open-ended questions included “why” and “is there anything else?” An open-ended questioning format is displayed in Table 7.

Table 7.

*Open-ended Question*

<table>
<thead>
<tr>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Why did you give the rating you gave?</td>
</tr>
<tr>
<td>Is there anything else?</td>
</tr>
</tbody>
</table>

The SSI also asked students to rate their perceptions on a scale from one to ten. Figure 1 displays a rated item addressing perceived control.
“Please rate how much control you felt you had over your grades last year as a 9th grader. One means you had NO control over your grades as a 9th grader. Ten means you felt you could control the grades you got based on your output of work. What number between 1 and 10 was right for you last year as a 9th grader?”

“Please place an “X” on the arrow as to how much control you had over your grades last year.”

![Control Scale]

In 9th grade I had no control over my grades at school. Teachers assigned grades and I had nothing to do with what grades they assigned me.

I had some control of my grades at school.

I had a lot of control over the grades I got in 9th. Teachers assigned me grades and I had a lot of power regarding what those grades would be based on what I did or did not do.

**Figure 1. Student-Rated Item for Perceived Control**

Students were also asked to rate their perceptions of connection as displayed in Figure 2.

Please rate how you fit in or belonged in your SLC last year. What number between 1 and 10 is right for you FOR 9TH GRADE? Please look at the visual before you give me your answer.

“Please place an “X” on the arrow as to how you feel about they way you fit in at school in 9th grade.”

![Connection Scale]

I didn’t fit in at all and I felt I did not belong at this school.

I fit in OK. My fit to this school was not low and it was not high; it was in the middle.

I fit in very well here at school and I belonged here and nowhere else; this school was a perfect fit for me.

**Figure 2. Student-Rated Item for Perceived Connection**
The SSI also asked students to rate their perceptions of effort as displayed in Figure 3.

“How much effort did you put forth last year as a 9th grader: a little or a lot? Please look at the chart, where 1 means you put forth no effort and 10 means you put forth a lot of effort in 9th grade. What number is right for you?

“Please place an ‘X’ on the arrow as to how much effort you put forward at school and during homework last year as a 9th grade student at ______.”

1 2 3 4 5 6 7 8 9 10

I did not put forth effort on my school work or on homework.

I worked a medium amount of effort at school and on homework.

I worked my hardest.

Figure 3. Student-Rated Item for Perceived Effort

The SSI also presented students with dichotomous questions. Questions are presented in Table 8.

Table 8.

Dichotomous Items

<table>
<thead>
<tr>
<th>Question</th>
<th>Response Choices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did you work at your school work mostly because:</td>
<td>Your teacher or teachers encouraged/made you do your work.</td>
</tr>
<tr>
<td>Do you feel you work hard at school?</td>
<td>Yes</td>
</tr>
<tr>
<td>Do you feel as if you have some control over your grade?</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Do you feel a sense of belonging or “fitting in” at school?

Additionally, a Likert-style item investigated students’ perceptions of competence related to school. The item is displayed in Table 9.

Table 9.

<table>
<thead>
<tr>
<th>Likert-style Item for Perceptions of Competence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Please choose an answer to describe your ability as a student.</td>
</tr>
<tr>
<td>A. I think I have been a poor student.</td>
</tr>
<tr>
<td>B. I think I have been an average student.</td>
</tr>
<tr>
<td>C. I think I have been a good student.</td>
</tr>
<tr>
<td>D. I think I have been an excellent student.</td>
</tr>
</tbody>
</table>

The Staff SLC Survey. The SSS (Bemel, 2007), a paper and pencil survey, was also developed for this study and may be found in Appendix D. Its purpose was to gather information from staff in order to describe their perceptions of the SLCs attended by students involved in the study. By gathering staff opinions, the principal researcher would be able to identify whether or not the SLC models being examined were implemented using methods identified in the SLC literature based on Oxley’s Best Practices Checklist and Key Organizational Practices (Oxley, 2005b, 2006). The instrument identified three important components of SLC practices: (1) staffs’ functions within the SLC, (2) personalization of the SLC and (3) perceived sense of community in the SLC (Oxley,
The staff survey was piloted on five staff members at an urban public high school before it was administered to staff in the current study. No changes occurred as a result of the pilot survey.

Informal Staff Interviews. In addition to the SSS, informal interviews occurred between researchers and school staff during the data collection period. While interviews were spontaneous, staff members provided further insight about their experiences in their current and previous SLCs at the school.

Dependent Variables

Twelve dependent variables were identified in the current study. These variables included grade point average, accrued credits, attendance, teacher-student relationships, peer support for learning, family support for learning, perceived control and relevance of school work, future aspirations and goals, perceived connection, perceived effort, perceptions of competence, and perceived autonomy.

Grade point average (GPA). Researchers have positively linked student engagement with desirable learning outcomes including critical thinking and grades (Carini, Kuh, & Klein, 2006). These researchers suggested that the lowest-ability students benefited disproportionately from perceptions of a nurturing environment, such as a supportive climate and high quality relationships. Significant positive correlations were uncovered between low ability students and achievement, while high ability students benefited considerably less and no correlations were significant.

When measuring student engagement, academic indicators such as GPA are frequently used. In the current study, GPA was used as an indicator of academic engagement. GPA was calculated by dividing each student’s total amount of grade points
earned per credit (A = 4.0, B = 3.0, C = 2.0, D = 1.0, F = 0) by the total amount of credit hours attempted.

**Number of credits accrued.** Researchers have considered the number of credits accrued an indicator of academic engagement as it represents a student’s progress toward completing the school’s graduation requirements (Sinclair et al., 2003). In the current study, credits accrued by each student at the end of ninth grade and at the end of tenth grade were used as indicators of academic engagement.

**School attendance.** Numerous investigators acknowledge that an observable indicator of behavioral engagement is the attendance record (Anderson et al., 2004; Finn, 1989). Attendance information from 2005-06 and 2006-07 was obtained from the district database as an indicator of behavioral engagement.

**Teacher-student relationships.** Researchers have considered students’ relationships with teachers as an indicator of affective engagement (Appleton et al., 2006). Students have demonstrated more affective engagement indicators with caring and supportive relationships at school (Christenson & Thurlow, 2004; Connell & Wellborn, 1991). Mean scores from items on the SLCSES measuring teacher-student relationships were used as an indicator of affective engagement.

**Peer support.** Researchers have considered peer relationships as another indicator of affective engagement (Appleton et al., 2006). Students lacking peer relationships often experience isolation and less engagement at school than their counterparts. Mean scores from items on the SLCSES measuring peer support were used as an indicator of affective engagement.
Family support for learning. While some families support their child’s educational accomplishments, other families may divert their attention from their child’s educational progress. Researchers have considered the importance of one’s family support to impact affective engagement. Mean scores from items on the SLCSES measuring family support for learning were used as an indicator of affective engagement.

Future aspirations and goals. Students’ perceived beliefs related to learning goals and investment in learning were used in this study as an indicator of cognitive engagement. Mean scores from items on the SLCSES measuring future aspirations and goals were used as an indicator of cognitive engagement.

Perceived control and relevance of school work. Perceived control refers to the link between behaviors and outcomes. The amount of control over school work students felt and the importance of their school work represented an indicator of cognitive engagement in the current study. Mean scores from items on the SLCSES were used for this indicator of affective engagement. Additionally, information regarding this variable was gathered through student interviews as displayed in Table 10.

Perceived effort. The amount of perceived effort put forth represented an indicator of cognitive engagement in the current study. Three sources noted in Table 10 provided data related to this variable.

Perceived connection. Students’ perceptions and feelings related to perceived connection represented an indicator of affective engagement in the current study. Three sources noted in Table 10 provided data related to perceived connection.

Perceived competence. Students’ perceptions of competence represented an indicator of cognitive engagement. Perceived competence was chosen as an indicator
because one’s perceived competency/self-efficacy, or self-beliefs and perceptions regarding ability has been linked to persistence in students. Specifically, students with a higher degree of self-efficacy are more likely to demonstrate persistence (Furrer, Skinner, Marchand, & Kindermann, 2006). Perceived competence was measured as described in table 10.

Perceived autonomy. Students’ perceptions of autonomy represented an indicator of cognitive engagement. Autonomous behaviors have been linked to high-quality learning or lack thereof (Deci et al., 1991). Students in the current study rated their perceived autonomy by answering dichotomous items and open-ended items.

Table 10.

**Twelve Dependent Variables, Corresponding Ranges, and Methods Used**

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Possible range or response</th>
<th>Method used to measure variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPA</td>
<td>.0–4.0</td>
<td>Mean GPA’s were calculated for each group.</td>
</tr>
<tr>
<td>Credits accrued (9th grade)</td>
<td>.0–15.0</td>
<td>3.75 credits required per quarter.</td>
</tr>
<tr>
<td>(10th grade)</td>
<td>.0–30.0</td>
<td>15.00 credits expected by end of 9th grade; 30.00 credits usually earned by end of 10th grade. Mean credits accrued were identified for each group.</td>
</tr>
<tr>
<td>Dependent variable</td>
<td>Possible range or response</td>
<td>Method used to measure variable</td>
</tr>
<tr>
<td>------------------------------------</td>
<td>---------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Percent attendance</td>
<td>.0–1.0</td>
<td>Number of days present / number of days in school year. Mean attendance scores were identified for each group.</td>
</tr>
<tr>
<td>Teacher-student relationships</td>
<td>9.0–36.0</td>
<td>Nine items were scored using a four-point rating with possible mean scores ranging from 9 to 36. All items were coded (some reversed) so that higher scores represented higher engagement levels. Mean scores were calculated for each group.</td>
</tr>
<tr>
<td>Peer support for learning</td>
<td>6.0–24.0</td>
<td>Six items were scored using a four-point rating with possible mean scores ranging from 6 to 24. All items were coded (some reversed) so that higher scores represented higher engagement levels. Mean scores were calculated for each group.</td>
</tr>
<tr>
<td>Family support for learning</td>
<td>4.0–16.0</td>
<td>Four items were scored using a four-point rating with possible mean scores ranging from 4 to 16. All items were coded (some reversed) so that higher scores represented higher engagement levels. Mean scores were calculated for each group.</td>
</tr>
<tr>
<td>Dependent variable</td>
<td>Possible range or response</td>
<td>Method used to measure variable</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>----------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>Future aspirations and goals</td>
<td>5.0–20.0</td>
<td>Five items were scored using a four-point rating with possible mean scores ranging from 5 to 20. All items were coded (some reversed) so that higher scores represented higher engagement levels. Mean scores were calculated for each group.</td>
</tr>
<tr>
<td>Control and relevance of school work</td>
<td>9.0–36.0</td>
<td>Nine items were scored using a four-point rating with possible mean scores ranging from 9 to 36. All items were coded (some reversed) so that higher scores represented higher engagement levels. Mean scores were calculated for each group.</td>
</tr>
<tr>
<td>Control and relevance of school work</td>
<td>1–10</td>
<td>Ratings on a scale from 1-10, 1 = low, 10 - high. Means calculated for each group.</td>
</tr>
<tr>
<td>Control and relevance of school work</td>
<td>Yes/No</td>
<td>yes = 1 no = 0; percents calculated for each group.</td>
</tr>
<tr>
<td>Control and relevance of school work</td>
<td>Open-ended questions</td>
<td>Sorted into themes.</td>
</tr>
<tr>
<td>Perceived effort</td>
<td>1–10</td>
<td>Ratings on a scale from 1-10. Means calculated.</td>
</tr>
<tr>
<td>Perceived effort</td>
<td>Yes/No</td>
<td>yes = 1 no = 0; Percents calculated.</td>
</tr>
</tbody>
</table>
| Perceived effort                               | Open-ended questions       | Sorted into themes.
<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Possible range or response</th>
<th>Method used to measure variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived connection</td>
<td>1–10</td>
<td>Ratings on a scale from 1-10. Means calculated for each group.</td>
</tr>
<tr>
<td>Perceived connection</td>
<td>Yes/No</td>
<td>yes = 1 no = 0; Percents calculated</td>
</tr>
<tr>
<td>Perceived connection</td>
<td>Open-ended questions</td>
<td>Sorted into themes</td>
</tr>
<tr>
<td>Perceived competence</td>
<td>Yes/No</td>
<td>yes = 1 no = 0; Percents calculated</td>
</tr>
<tr>
<td>Perceived autonomy</td>
<td>Yes/No</td>
<td>yes = 1 no = 0; Percents calculated</td>
</tr>
</tbody>
</table>

**Procedures**

Permission to conduct the study was granted by the University of Minnesota Institutional Review Board (IRB) and the Research Evaluation and Assessment department (REA) of the school district. The majority of data collection efforts took place between April and June 2007. Letters describing the purpose of the study were sent to all families involved in the study. The Institutional Review Board and district research department both approved a passive consent process from parents, while student assent forms were distributed and collected on the day of survey administration. Student assent forms were also collected prior to the commencement of student interviews. Copies of all permission forms and assent forms are contained in Appendix E.

Administration of the SLCSES was completed in small groups during non-instructional time. School psychology graduate students used a standardized protocol that included a short description of the research project accompanied by an explanation of
risks and benefits. Participants were given time to ask questions about the project. Survey administrators read the standardized directions for the SLCSES aloud and then read each item aloud, allowing three to five seconds for students to respond. This was done to control for the various reading levels of students. Upon completing the surveys, graduate students collected surveys from each student while students were seated.

Following administration of the SLCSES, data were screened for response patterns and missing responses. Five students did not endorse the two validity items on the instrument, and were therefore excluded from further analysis. Of the 3,700 possible survey responses for the entire sample (100 participants * 37 survey items) 40 responses were missing, representing approximately 1% of total responses. Therefore, missing data did not appear to be a concern.

The SSI was administered by four graduate students including the principal investigator used a standardized protocol. A short description of the interview was provided along with an explanation of risks and benefits. Each session was audio-taped for later transcription. Training on administration of the SSI was provided to ensure standardization of administration techniques. First, the principal investigator held a meeting to discuss each interview item as well as procedures for administration. All research assistants were then asked to conduct one pilot interview. Following the pilot interview, each assistant was instructed to return the protocol and audiotape to the principal investigator, who provided feedback. Two changes occurred as a result of this process. First, research assistants were reminded to refrain from providing affirmations such as “good” or “OK” after students responded to items, as this could influence outcomes due to demand characteristics. Second, research assistants were reminded to
record student responses on the protocol as accurately as possible instead of summarizing thoughts or comments in their own words.

Open-ended questions were analyzed according to Miles and Huberman’s guidelines (1994) for reducing, validating, and presenting qualitative data. To sort student open-ended responses into themes, training was provided. In addition to the investigator, a school psychology graduate student was trained in order to ensure inter-coder reliability (see Appendix F for materials used for training). Each rater coded student responses independently, and the original inter-rater reliability coefficient was .83. Following a discussion of differences and a clarification of themes, all SSI data were re-coded using clarifications from the discussion the inter-rater reliability coefficient rose to .91.

Justification for using categories in order to identify sub-themes included the researcher’s knowledge that the themes used have been given prominence in the literature on SLCs and in student engagement literature. Further, creating a list of categories forces the researcher to link research questions with conceptual issues (Miles & Huberman, 1994).

The SSS was placed in mailboxes of staff members upon approval of the school principal. A letter describing the purpose of the study was included. Staff members were asked to complete the survey and place it into a sealed envelope (provided). A box was reserved in the school’s main office as a receptacle for the surveys. Researchers followed up with staff who did not turn in surveys. At the end of each school day for five consecutive days, educational psychology graduate students attempted to collect surveys. Efforts were implemented to protect confidentiality; graduate students entered teacher’s
classrooms during the five day span to gather surveys during teacher preparation times in the privacy of the empty classroom.

A retrospective method of measuring change between pre-test and post-test scores was used in this study for each dependent variable, as all instruments were administered retrospectively and currently for data collection purposes. The retrospective method allowed evaluators to ask respondents to recall pre-intervention status at post-test time (Bray, Maxwell, & Howard, 1984; Lam & Bengo, 2002, Pratt, McGuigan, & Katzev, 2000). A more conventional method used in research has often consisted of a pre-test and post-test design in which two parallel measuring instruments are given at two points in time and then differences between scores are computed. Significant differences between the pre-intervention and post-intervention scores are often interpreted as indicators of changes due to interventions. Yet the traditional pre-post design may suffer from confounding variables that may result in invalid change scores (Cook & Campbell, 1979). Such threats to internal validity are multiple and have included pre-test effects, interference effects, sensitization, and response-shift bias.

In order for pre-test and post-test scores to be compared, the two sets of scores must have a common metric (Cronbach & Furby, 1970). When using self-report instruments, it is typically assumed that student perceptions of measurement will remain the same from pre-test to post-test. However, researchers have demonstrated that by taking part in an intervention, subjects experienced more understanding of concepts being assessed at pre and post testing. Eventually, the subjects realized their pre-test ratings were inaccurate due to their enhanced knowledge from the intervention (Howard & Dailey, 1979). As a result, evaluators may misinterpret the effectiveness of an
intervention because posttest ratings could be contaminated by the student’s altered understanding of the construct. In other words, participants changed the metric system used during the two different rating opportunities. This is referred to as response shift bias (Howard & Dailey, 1979).

These researchers purport that if subjects are given the opportunity to answer questions retrospectively at post-test time, their ratings are made in close proximity and are more likely to rely upon the same metric system. Thus, the retrospective method will be free of response-shift bias according to this theory because each subject has a shorter time frame to change their standard of measurement when providing ratings. As a result, researchers have recommended upon completion of an intervention, subjects should be asked to provide responses two times to all items on a self-report measure.

In the current study, participants first were asked to rate themselves now (during 2007) on each item. Second, they were asked to respond to the same item for the former year (during 2006). Since the two ratings have been made from the same reference point, they are theoretically less likely to be biased due to a response shift (Howard & Dailey; Pratt, McGuigan, & Katzev, 2000). Retrospective methodology may be ideal when opportunities for a repeated measures design are not feasible (as in the current study).

Such methodology was particularly pertinent to the proposed study. Specifically, participants were nearing the end of tenth grade in either SLC A or B at the time of data collection. Further, 50% of these students had been removed from a less-than-optimal SLC approximately one year preceding data collection. The goal of the retrospective design was to validly and reliably obtain historical data from participants in the study after the low-functioning SLC had been discontinued, since gathering pre-test
information was not possible. Limitations of the retrospective design will be presented in the discussion section of this paper.

Conditions

Three separate SLCs housed within one high school were studied. SLC A and SLC B were reported by school district officials to be highly functioning, while SLC C had been reported to function poorly. Both SLC A and SLC B functioned at a school since September, 2000 and remain functioning. SLC C functioned at the school since September, 2000 but was discontinued at the end of the 2005-06 academic year. As a result of its discontinuance, SLC C’s students were re-assigned to either SLC A or SLC B for the 2006-07 academic year. Assignments were based on student preference, teacher recommendation, parent request, or by default when none of these factors applied. The school district assumed SLC A and SLC B were equal in quality. This assumption was partially due to documents from the school’s literature, where SLC A had been touted as promoting:

. . . a stimulating, challenging and relevant education in a broad array of subjects. Students are immersed in the liberal arts: literature, history, mathematics, science, world languages, and independent study. The mission of the SLC is to help students think creatively, critically, and analytically. Students experience peer tutoring, 30 hours of community service, independent projects, and special seminars. All students must complete a minimum of three years of mathematics, three years of science, two years of a language, one year of humanities, and one year of fine arts (Midwestern Public School District, 2006, p. 1).

Similarly, SLC B had been touted as:

. . . a rigorous, well-rounded program that has used a progressive college preparatory education model where students are given more freedom and responsibility for directing their learning than in traditional education programs. The SLC is the oldest continuous college-prep program in the school district. The program balances mentoring, cultivating passion for
life-long learning, and college preparation. Students graduate and go on to a wide variety of post-secondary programs including some of the most selective colleges in the US and the world. This balance is accomplished through student courses structured around authentic learning, discipline, specific experiences and interdisciplinary units. Students will graduate from the SLC as independent, creative thinkers and will be well-prepared for any post-secondary program (Midwestern Public School District, 2006, p. 1).

SLC C appeared to have a different mission and level of rigor than SLCs A and B, as noted by the following description in the high school’s informational literature:

[SLC C’s] mission has been to provide basic education, environmental skills, and self-advocacy skills to its students. Enrolled students have come primarily from the school’s attendance area. As a result, [SLC C] has been comprised of a disproportionate number of students of color, students receiving free/reduced lunch, and low achieving students (Midwestern Public School District, 2006, p. 10).

According to school district records and records at the high school, unlike SLC A and SLC B, little information existed regarding SLC C’s model such as details of student requirements, coursework, and student outcomes. When the current investigator asked an administrator to discuss SLC C, the educator declined and stated, “It best be left in the past” (personal communication, April 20, 2007). Historically, SLC C had always consisted of a smaller number of students than either SLC A or SLC B (e.g., during 2005-2006, ninth graders enrolled in SLC A and SLC B totaled 187 and 190, respectively); during 2005-2006, ninth graders enrolled in SLC C totaled 73.

The current study initially sought to establish whether SLC A and SLC B were equal to each other in quality, and whether SLC C was inferior to SLC A and SLC B in quality (SLC A = SLC B) > (SLC C). To investigate the issue of equality/inequality among SLCs, the SSS was administered to staff members. The percentage of staff responses to dichotomous items are presented in Table 11.

78
Table 11.

**SSS Staff Retrospective Perceptions**

<table>
<thead>
<tr>
<th>Best Practices (Oxley, 2005a, 2006)</th>
<th>SLC A</th>
<th>SLC B</th>
<th>SLC C</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n = 5, ( ) = %</td>
<td>n = 5, ( ) = %</td>
<td>n = 13, ( ) = %</td>
</tr>
<tr>
<td>Staff's duty within the SLC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teachers spent a considerable amount of time daily in the SLC.</td>
<td>4 (80%)↑</td>
<td>1* (20%)</td>
<td>3 (60%)↑</td>
</tr>
<tr>
<td>Collaboration occurred between teachers.</td>
<td>4 (80%)↑</td>
<td>1* (20%)</td>
<td>4 (80%)↑</td>
</tr>
<tr>
<td>Teams of teachers shared the same students.</td>
<td>4 (80%)↑</td>
<td>1* (20%)</td>
<td>4 (80%)↑</td>
</tr>
<tr>
<td>Counselors were important members of SLC.</td>
<td>5 (100%)↑</td>
<td>0 (0%)</td>
<td>5 (100%)↑</td>
</tr>
<tr>
<td>Special education/English language learner staff were key team members.</td>
<td>3 (60%)</td>
<td>2 (40%)</td>
<td>3 (60%)</td>
</tr>
<tr>
<td>Personalization</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>At least one-half of the school day was spent in the SLC by the student.</td>
<td>3 (60%)</td>
<td>2 (40%)</td>
<td>3 (60%)</td>
</tr>
<tr>
<td>Best Practices (Oxley, 2005a, 2006)</td>
<td>SLC A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Each student remained in a specific SLC for at least two years.</td>
<td>5</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>There was physical proximity of the classrooms.</td>
<td>2</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Most students knew which SLC they belonged to.</td>
<td>4</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Sense of Community</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students appeared to feel supported and to feel a sense of belonging.</td>
<td>4</td>
<td>1⁺</td>
<td>5</td>
</tr>
<tr>
<td>Students appeared to be positive and showed a sense of pride.</td>
<td>5</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>There appeared to be a sense of community.</td>
<td>5</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Students appeared to feel welcome in their SLC.</td>
<td>5</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Best Practices (Oxley, 2005a, 2006)</td>
<td>SLC A $n = 5$, (%)</td>
<td>SLC B $n = 5$, (%)</td>
<td>SLC C $n = 13$, (%)</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>--------------------</td>
<td>--------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Students’ relationships with peers were at least adequate.</td>
<td>Yes: 5 (100%)</td>
<td>No: 0 (0%)</td>
<td>Yes: 4 (80%)</td>
</tr>
<tr>
<td>Students’ relationships with teachers were at least adequate.</td>
<td>Yes: 5 (100%)</td>
<td>No: 0 (0%)</td>
<td>Yes: 4 (80%)</td>
</tr>
<tr>
<td>The SLC was diverse.</td>
<td>Yes: 4 (80%)</td>
<td>No: 1* (20%)</td>
<td>Yes: 4 (80%)</td>
</tr>
</tbody>
</table>

*Note.* Pluses (+) indicate a higher percent of endorsements in SLC A or SLC B when compared to SLC C, or a higher percentage of endorsements in SLC C when compared to SLC A or SLC B. Equal signs (=) indicate an equal percent of endorsements between at least two SLC groups. Not all staff provided an answer to each item. *One specific teacher consistently responded, “no,” resulting in an outlier when compared to others’ responses.

Based on staff perceptions, SLC A outperformed SLC C on eleven indicators of best practice. Similarly, SLC B outperformed SLC C on 10 best practice indicators. SLC C outperformed both SLC A and SLC B on four indicators. The indicators identified as pervasively lacking in SLC C were highly relevant to SLC quality. For example, SLC A and SLC B both exceeded SLC C in 7 out of 7 indicators of connection and belonging, referred to in Table 11 as sense of community. The particular practices rated deficient in SLC C have been noted to be crucially important for SLC success, as the foundation for SLCs has focused primarily on the promotion of belongingness and a sense of community (Oxley, 2005a). Based on SSS results, more support was provided to suggest SLCs A and B functioned better than SLC C according to best practices identified in the SLC literature.
Open-ended questions were used on the SSS in order to provide an alternate, less structured approach for teachers completing the survey. Responses to such items added further support to the hypothesis that fewer best practices were implemented by SLC C than by SLC A or SLC B. Staff responses representing frequently occurring themes are presented in Table 12, while all comments from completed staff surveys may be found in Appendix G.

Table 12.

Staff Responses to SSS Open-ended Items

<table>
<thead>
<tr>
<th>Staff Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SLC A</strong></td>
</tr>
<tr>
<td>“Kids feel welcome in this SLC.”</td>
</tr>
<tr>
<td>“The philosophy of our program is cutting edge.”</td>
</tr>
<tr>
<td>“Our curriculum is matchless.”</td>
</tr>
</tbody>
</table>

| **SLC B** |
| “The students seem to feel very much supported.” |
| “Our students excel in this SLC.” |
| “The students are highly motivated.” |

| **SLC C** |
| “Everybody looked down on our kids.” |
| “They felt like throw-aways.” |
| “[SLC C] was so segregated that it was unethical.” |
| “It was assumed that if you were a student of color you belonged to [SLC C].” |
| “Everybody looked down on our kids and assumed [their] skills were lower so people didn’t have high expectations.” |
Staff Comments

“The kids [in SLC C] were less able than those in the rest of the high school.”
“Teachers got to have small classes because nobody wanted to teach in the SLC.”
“Our kids were ashamed.”

In addition, the number of students enrolled in advanced placement and honors course work during 2005-2006 was examined. In SLC A, 22% of students were enrolled in such rigorous classes and passed, while in SLC B 15% of students enrolled in and passed advanced course work. On the contrary, 0% of students in SLC C experienced such rigorous course work. Clearly, SLC C was disparate in its rigorous course offerings.

Based on results of categorical data and open-ended items on the SSS, informal staff interviews, literature provided by the school, and advanced course offerings, large discrepancies were uncovered between SLC A and SLC C. Similar implementation discrepancies between SLC B and SLC C were uncovered. However, SLC A and SLC B demonstrated few discrepancies in their implementation models. As a result, the principal investigator chose to collapse these SLCs to represent one group for comparison purposes as multiple forms of data collection provided evidence that the school district’s assumption was accurate (SLC A = SLC B) > (SLC C).

Analyses

This study incorporated a nonequivalent group, pre-test/post-test (retrospective), quasi-experimental design. Both qualitative and quantitative analyses were used to answer research questions. The nonequivalent groups design – so named because of the likelihood that the control group and treatment group were not equivalent – is a common
alternative to true experimental designs in the evaluation of education programs when, as
in this study, random assignment is not possible or practical.

Due to the nonequivalent-groups design (NEGD), analysis included adjusting the
pretest scores for measurement error (Trochim & Donnelly, 2007; West, Biesanz, & Pitts,
2000). Otherwise, the ANCOVA model may contain bias and may not present the true
program effect (without adjusting the pretest measurement error, an effect may be
introduced when there is actually no effect, or a Type I error).

In order to remove pre-test measurement error, a reliability correction must adjust
the pre-test measure for error by using the reliability coefficient. As a result, each
subject’s score will be closer to the pre-test mean for their group. For this reason, pre-test
measures of academic, behavioral, affective, and cognitive engagement were adjusted in
the current study. The model used to account for this potential bias is as follows:

\[ X_{adj} = \bar{X} + \alpha (X - \bar{X}) \]

Where: \( X_{adj} \) = adjusted pre-test value

\( \bar{X} \) = original group mean on the pre-test

\( \alpha \) = reliability estimate for the group on the pre-test

In the case where adjusted means are to be analyzed, as can be seen in the model,
the researcher must first establish the reliability of the adjusted (or residualized) scores
prior to the ANCOVA (Tracz et al., 2005; Trochim & Donnelly, 2007). The challenge
lies in determining the appropriate estimate of reliability to use. While it tends to be a
high estimate, Cronbach’s \( \alpha \) is by far the most frequently used measure of internal
reliability (Thorndike, 2005). This was the reliability statistic used in the current study.
To answer the first research question, after adjusting pre-test mean scores, one-way analysis of variance (ANCOVA) was conducted on multiple engagement indicators (controlling for the effects of the adjusted pre-test scores): credits accrued, GPA, percent attendance, teacher-student relations, peer support, family support, perceived control/relevance of school work, and future aspirations/goals. P-values were examined for statistical significance. The primary hypothesis, that the transfer group would demonstrate significantly increased mean scores on twelve dependent variables, was tested using a one-tailed test with alpha set at .01 to accommodate for the possibility of familywise error rates across the multiple ANCOVAs. A one-tailed test was chosen for hypothesis testing in order to look for an increase in the parameter, rather than a two-tailed test, which would have looked for an increase or a decrease in the parameter. Partial eta squared values were obtained to examine effect sizes, then converted according to Cohen (1977) for comparison with Cohen’s $d$.

To answer the second research question, descriptive statistics were examined for all rated items in order to provide information related to central tendency and dispersion. Appropriate items were sorted and categorized into themes and sub-themes according to methods prescribed by Miles and Huberman (1994) for qualitative data analysis.
CHAPTER 4

Results

Research Question One. What are the effects of participation in a quality SLC on student progress as measured by the following engagement indicators: (a) academic engagement (GPA, credits accrued), (b) behavioral engagement (attendance record), (c) affective engagement (teacher relations, peer support, family support), and (d) cognitive engagement (perceived control and relevance of school work, future aspirations and goals)?

Descriptive Statistics. Descriptive statistics for all variables are presented in Table 13. Range of scores as well as observed scores on pre and post measures are shown. All distributions were plotted and scanned for kurtosis and skewness. Each distribution was found to skew negatively, indicating a higher proportion of respondents fell above the mean. This finding is not surprising, as one would expect the majority of students to perform above average based on the dependent variables chosen (e.g., for variable GPA, fewer students would be expected to fall below the mean or the majority of high school students would be considered performing below average).
Table 13.  

*Descriptive Statistics for Transfer Group and Continuously Enrolled Group*

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Range</th>
<th>SD</th>
<th>Pre</th>
<th>Post</th>
<th>Pre</th>
<th>Post</th>
<th>Pre</th>
<th>Post</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPA</td>
<td>Transfer</td>
<td>47</td>
<td>2.12</td>
<td>1.98</td>
<td>.0 - 4.0</td>
<td>.0 - 4.0</td>
<td>.89</td>
<td>.82</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Continuous</td>
<td>49</td>
<td>3.03</td>
<td>2.94</td>
<td>.0 - 4.0</td>
<td>.0 - 4.0</td>
<td>.79</td>
<td>.84</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Credits Earned</td>
<td>Transfer</td>
<td>47</td>
<td>14.72</td>
<td>21.40</td>
<td>.0 - 15.0</td>
<td>.0 - 30.0</td>
<td>4.01</td>
<td>5.66</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Continuous</td>
<td>49</td>
<td>17.28</td>
<td>25.46</td>
<td>.0 - 15.0</td>
<td>.0 - 30.0</td>
<td>2.46</td>
<td>4.67</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent Attendance</td>
<td>Transfer</td>
<td>47</td>
<td>.91</td>
<td>.89</td>
<td>.0 - 1.0</td>
<td>.0 - 1.0</td>
<td>.09</td>
<td>.14</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Continuous</td>
<td>49</td>
<td>.95</td>
<td>.93</td>
<td>.0 - 1.0</td>
<td>.0 - 1.0</td>
<td>.06</td>
<td>.12</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher-student relationships</td>
<td>Transfer</td>
<td>50</td>
<td>23.20</td>
<td>23.26</td>
<td>9.0 - 36.0</td>
<td>9.0 - 36.0</td>
<td>3.64</td>
<td>4.94</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Continuous</td>
<td>49</td>
<td>23.29</td>
<td>23.53</td>
<td>9.0 - 36.0</td>
<td>9.0 - 36.0</td>
<td>4.52</td>
<td>4.88</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indicator</td>
<td>Group</td>
<td>N</td>
<td>Pre</td>
<td>Post</td>
<td>Pre^a</td>
<td>Post</td>
<td>Pre</td>
<td>Post</td>
<td>Pre</td>
<td>Post</td>
<td>Pre</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>-------------</td>
<td>----</td>
<td>-----</td>
<td>------</td>
<td>-------</td>
<td>------</td>
<td>-----</td>
<td>------</td>
<td>-----</td>
<td>------</td>
<td>-----</td>
</tr>
<tr>
<td>Control and relevance of schoolwork</td>
<td>Transfer</td>
<td>50</td>
<td>50</td>
<td>25.42</td>
<td>25.72</td>
<td>9.0 - 36.0</td>
<td>9.0 - 36.0</td>
<td>4.14</td>
<td>3.77</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Continuous</td>
<td>48</td>
<td>48</td>
<td>23.88</td>
<td>24.29</td>
<td>9.0 - 36.0</td>
<td>9.0 - 36.0</td>
<td>4.86</td>
<td>4.58</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peer support at school</td>
<td>Transfer</td>
<td>46</td>
<td>46</td>
<td>19.17</td>
<td>19.70</td>
<td>6.0 - 24.0</td>
<td>6.0 - 24.0</td>
<td>2.69</td>
<td>2.54</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Continuous</td>
<td>50</td>
<td>50</td>
<td>19.48</td>
<td>20.18</td>
<td>6.0 - 24.0</td>
<td>6.0 - 24.0</td>
<td>2.06</td>
<td>2.33</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Future aspirations and goals</td>
<td>Transfer</td>
<td>48</td>
<td>48</td>
<td>16.42</td>
<td>17.40</td>
<td>5.0 - 20.0</td>
<td>5.0 - 20.0</td>
<td>2.69</td>
<td>2.06</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Continuous</td>
<td>47</td>
<td>47</td>
<td>17.94</td>
<td>18.34</td>
<td>5.0 - 20.0</td>
<td>5.0 - 20.0</td>
<td>2.04</td>
<td>1.77</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family support for learning</td>
<td>Transfer</td>
<td>50</td>
<td>50</td>
<td>13.32</td>
<td>13.28</td>
<td>4.0 - 16.0</td>
<td>4.0 - 16.0</td>
<td>2.50</td>
<td>2.30</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Continuous</td>
<td>50</td>
<td>49</td>
<td>13.46</td>
<td>13.69</td>
<td>4.0 - 16.0</td>
<td>4.0 - 16.0</td>
<td>1.75</td>
<td>1.95</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

^a Non-adjusted pre-test mean scores.
GPA. Figure 4 displays the bivariate distribution of GPAs for year one and year two. Visual analysis of the scatter plot provides evidence that the groups do not appear to be equivalent in terms of year one GPA.

![Figure 4. Bivariate distribution of GPAs for the treatment and control groups](image)

Students in the sample earned GPAs ranging from .34 to 4.0 at the end of ninth grade. GPAs ranged from .33 to 4.0 at the end of tenth grade. Table 14 shows ANCOVA results for GPA and accrued credits using adjusted pre-test scores. Results show that for GPA, the adjusted post-test mean of the transfer group was $M = 2.48$, $SE = .30$ and was not
significantly different than the adjusted post-test GPA mean of the control group $M = 2.54, SE = .03, F_{1,93} = 1.91, p = .170$. Transfer students’ GPA did not improve after experiencing their new SLC.

_Credits accrued._ Students comprising the sample groups earned credits ranging from 2.25 to 21.0 at the end of ninth grade, while at the end of tenth grade number of credits earned ranged from 5.50 to 31.50. The adjusted post-test mean for the transfer group $(M = 23.71, SE = .26)$ was not significantly different than the continuously enrolled group’s adjusted post-test mean $(M = 23.0, SE = .25) F_{1,93} = .01, p = .981$, indicating students in the transfer group did not improve in year 2 on this dependent variable.

Table 14.

<table>
<thead>
<tr>
<th>ANCOVA Results for GPA and Accrued Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Adjusted means</strong></td>
</tr>
<tr>
<td>Transfer group</td>
</tr>
<tr>
<td>Continuous enrollment</td>
</tr>
<tr>
<td>df</td>
</tr>
<tr>
<td>------------------</td>
</tr>
<tr>
<td>Year 2 GPA</td>
</tr>
<tr>
<td>Year 2 credits accrued</td>
</tr>
</tbody>
</table>

$^a$According to Cohen (1997), Partial eta squared may be interpreted as .01 = small effect size, .06 = medium effect size, .14 = large effect size.

_Percent attendance._ Students in the sample group demonstrated percent attendance scores ranging from .69 to 1.0 during ninth grade. As tenth graders, student percent attendance scores ranged from .31 to 1.0. Table 15 presents ANCOVA results using adjusted pre-test scores. Results indicated the adjusted post-test mean of the transfer group $(M = .941, SE = .01)$ was significantly different than the adjusted post-test
percent attendance mean of the continuously enrolled students ($M = .885, SE = .01$) $F_{1,93} = 8.51, p = .004$. The effect size (.084) was medium. The significant difference indicates that after transfer students moved to a higher-functioning SLC, a positive effect on attendance was demonstrated. Further, the effect size indicates practical significance, demonstrating that the magnitude of the difference is noteworthy and promising.

Table 15:

**ANCVOA Results for Attendance**

<table>
<thead>
<tr>
<th></th>
<th>Transfer group</th>
<th>Continuous enrollment</th>
<th>df</th>
<th>F</th>
<th>$P$</th>
<th>Partial Eta squared$^a$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 2 attendance</td>
<td>.941</td>
<td>.885</td>
<td>1</td>
<td>8.51</td>
<td>.004**</td>
<td>.08</td>
</tr>
</tbody>
</table>

$^{a}$According to Cohen (1997), Partial eta squared may be interpreted as .01 = small effect size, .06 = medium effect size, .14 = large effect size.

**Teacher-student relations.** Table 16 displays ANCOVA results using adjusted pre-test scores. Results indicated the adjusted post-test mean of the transfer group ($M = 23.85, SE = .46$) was not significantly different than the adjusted post-test mean of the continuously enrolled students ($M = 23.43, SE = .48$) $F_{1,92} = .385, p = .537$. Enrolling students in a higher functioning SLC did not significantly improve transfer students’ perceived relationships with teachers.
Table 16.

**ANCOVA Results for Teacher-Student Relations**

<table>
<thead>
<tr>
<th></th>
<th>Transfer group</th>
<th>Continuous enrollment</th>
<th>df</th>
<th>F</th>
<th>P</th>
<th>Partial Eta squared&lt;sup&gt;a&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher-student relations</td>
<td>23.85</td>
<td>23.43</td>
<td>1</td>
<td>.385</td>
<td>.537</td>
<td>.004</td>
</tr>
</tbody>
</table>

<sup>a</sup>According to Cohen (1997), Partial eta squared may be interpreted as .01 = small effect size, .06 = medium effect size, .14 = large effect size.

*Peer support.* The SLCSES was also used to collect information for this variable. Table 17 displays ANCOVA results using adjusted pre-test scores. Results indicated the adjusted post-test mean of the transfer group ($M = 19.85, SE = .24$) was not significantly different than the adjusted post-test mean of the continuously enrolled students ($M = 20.04, SE = .24$) $F_{1,88} = .284, p = .595$. By enrolling students in a higher functioning SLC, their perceived amount of support from peers did not improve.

Table 17.

**ANCOVA Results for Peer Support**

<table>
<thead>
<tr>
<th></th>
<th>Transfer group</th>
<th>Continuous enrollment</th>
<th>df</th>
<th>F</th>
<th>P</th>
<th>Partial Eta squared&lt;sup&gt;a&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer support</td>
<td>19.85</td>
<td>20.04</td>
<td>1</td>
<td>.284</td>
<td>.595</td>
<td>.002</td>
</tr>
</tbody>
</table>

<sup>a</sup>According to Cohen (1997), Partial eta squared may be interpreted as .01 = small effect size, .06 = medium effect size, .14 = large effect size.
Family support. Table 18 displays ANCOVA results for family support using adjusted pre-test scores. Results indicated the adjusted post-test mean of the transfer group ($M = 13.39, SE = .12$) was not significantly different than the adjusted post-test mean of the continuously enrolled students ($M = 13.54, SE = .13$) $F_{1,91} = .668, p = .416$. Enrolling students in a higher functioning SLC did not significantly improve their perceived amount of support from family.

Table 18.

**ANCOVA Results for Family Support**

<table>
<thead>
<tr>
<th></th>
<th>Adjusted means</th>
<th>DF</th>
<th>F</th>
<th>P</th>
<th>Partial Eta squareda</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Adjusted means</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Transfer group</strong></td>
<td>13.39</td>
<td>13.54</td>
<td>1</td>
<td>.668</td>
<td>.416</td>
</tr>
</tbody>
</table>

aAccording to Cohen (1997), Partial eta squared may be interpreted as .01 = small effect size, .06 = medium effect size, .14 = large effect size.

Perceived control and relevance of school work. Table 19 displays ANCOVA results using adjusted pre-test scores. Results indicated that the adjusted post-test mean of the transfer group ($M = 25.17, SE = .32$) was not significantly different than the adjusted post-test mean of the continuously enrolled students ($M = 25.31, SE = .34$) $F_{1,90} = .084, p = .772$. Enrolling students in a higher functioning SLC did not significantly improve perceived control and relevance of school work indicator scores.
Table 19.

**ANCOVA Results for Control and Relevance of Schoolwork**

<table>
<thead>
<tr>
<th>Adjusted means</th>
<th>Transfer group</th>
<th>Continuous enrollment</th>
<th>df</th>
<th>F</th>
<th>P</th>
<th>Partial Eta squared$^a$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control and relevance of school work</td>
<td>25.17</td>
<td>25.31</td>
<td>1</td>
<td>.084</td>
<td>.772</td>
<td>.001</td>
</tr>
</tbody>
</table>

$^a$According to Cohen (1997), Partial eta squared may be interpreted as .01 = small effect size, .06 = medium effect size, .14 = large effect size.

**Future aspirations and goals.** Table 20 displays ANCOVA results for future aspirations and goals using adjusted pre-test scores. Results indicated the adjusted post-test mean of the transfer group ($M = 18.02$, $SE = .19$) was not significantly different than the adjusted post-test mean of the continuously enrolled students ($M = 17.85$, $SE = .30$) $F_{1,89} = .332, p = .566$. Enrolling students in a higher functioning SLC did not significantly improve perceptions of future aspirations and goals.

Table 20.

**ANCOVA Results for Future Aspirations and Goals**

<table>
<thead>
<tr>
<th>Adjusted means</th>
<th>Transfer group</th>
<th>Continuous Enrollment</th>
<th>df</th>
<th>F</th>
<th>P</th>
<th>Partial Eta squared$^a$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Future aspirations and goals</td>
<td>18.02</td>
<td>17.85</td>
<td>1</td>
<td>.332</td>
<td>.566</td>
<td>.004</td>
</tr>
</tbody>
</table>

$^a$According to Cohen (1997), Partial eta squared may be interpreted as .01 = small effect size, .06 = medium effect size, .14 = large effect size.
Hypotheses. Eight hypotheses were proposed by the principal investigator at the onset of the study. Findings related to the hypotheses have been noted below.

i. The transfer group did not demonstrate significantly increased mean scores regarding number of credits when compared to the continuously enrolled group. These findings resulted in a failure to reject the null hypothesis.

ii. The transfer group did not demonstrate significantly increased mean scores regarding GPA when compared to the continuously enrolled group. These findings resulted in a failure to reject the null hypothesis.

iii. The transfer group significantly increased mean attendance scores after a year of enrollment in their new SLCs ($p = < .01$). The null hypothesis was rejected due to a positive effect on attendance. In other words, after students transferred to a higher-functioning SLC mean attendance scores significantly improved, demonstrating a medium effect size.

iv. The transfer group did not demonstrate significantly increased mean scores regarding teacher relations than the continuously enrolled group. These findings resulted in a failure to reject the null hypothesis.

v. The transfer group did not demonstrate significantly increased mean scores regarding peer support than the continuously enrolled group. These findings resulted in a failure to reject the null hypothesis.

vi. The transfer group did not demonstrate significantly increased mean scores regarding perceived family support than the continuously enrolled group. These findings resulted in a failure to reject the null hypothesis.
vii. The transfer group did not demonstrate significantly increased mean scores regarding perceived control and relevance of school work than the continuously enrolled group. These findings resulted in a failure to reject the null hypothesis.

viii. The transfer group did not demonstrate significantly increased mean scores regarding future aspirations and goals than the continuously enrolled group. These findings resulted in a failure to reject the null hypothesis.

*Research Question Two: What are the differences in perceived control, perceived connection, perceived effort, perceptions of competence, and perceived autonomy between students reassigned to a quality SLC and students who continuously attended the quality SLC?*

Items from the Student SLC Interview were analyzed to answer the second research question. Five variables were examined by this exploratory question: perceived control (this variable was also explored in research question 1), perceived connection, perceived effort, perceived competency, and perceived autonomy. Descriptive statistics provided in Table 21 demonstrate student responses to three rated items when provided with a scale ranging from one to ten regarding perceived control, perceived connection, and perceived effort.
Table 21.

*Descriptive Statistics*

<table>
<thead>
<tr>
<th>Item</th>
<th>Group</th>
<th>Sample size</th>
<th>Range</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>How much control do you feel you have over your grades in 10th grade?</td>
<td>Transfer</td>
<td>15</td>
<td>1.0 – 10.0</td>
<td>8.33</td>
<td>1.59</td>
</tr>
<tr>
<td></td>
<td>Continuous</td>
<td>16</td>
<td>1.0 – 10.0</td>
<td>7.94</td>
<td>1.48</td>
</tr>
<tr>
<td>How much do you fit in or belong in 10th grade?</td>
<td>Transfer</td>
<td>15</td>
<td>1.0 – 10.0</td>
<td>8.67</td>
<td>1.05</td>
</tr>
<tr>
<td></td>
<td>Continuous</td>
<td>16</td>
<td>1.0 – 10.0</td>
<td>8.60</td>
<td>1.30</td>
</tr>
<tr>
<td>How much effort do you put forward at school and during homework in 10th grade?</td>
<td>Transfer</td>
<td>15</td>
<td>1.0 – 10.0</td>
<td>7.07</td>
<td>1.58</td>
</tr>
<tr>
<td></td>
<td>Continuous</td>
<td>16</td>
<td>1.0 – 10.0</td>
<td>7.38</td>
<td>1.75</td>
</tr>
</tbody>
</table>

*Perceived control.* Students in the transfer group produced mean perceived control scores comparable to mean scores provided by continuously enrolled students (\(M = 8.33\), \(M = 7.94\), respectively). This suggests similar findings related to the amount of control both groups of students perceived over their grades during tenth grade. Perceived control dichotomous questioning resulted in 93% of transfer students (\(n = 14/15\)) reporting they were the primary controller of their grades due to working hard in their new SLC. One transfer student (6%) perceived having minimal control over grades. Among continuously enrolled students, 69% (\(n = 11/16\)) perceived they were the primary controller of grades, while 31% (\(n = 5/16\)) percent of students felt they were not in control of their grades.
Qualitative analysis of open-ended questions uncovered two sub-themes when students were asked about perceived control: (1) feeling one’s self is in control of grades; (2) feeling one’s teacher(s) control assigned grades. Both groups produced similar statements related to control during year 2. However, students in the transfer group frequently referenced their ninth grade year spent in SLC C. For example, some students indicated the curriculum used in their former SLC was easier, resulting in more perceived control during year 1, while others indicated they had more control over grades after transferring into the new SLC. Responses to open-ended questions are displayed in Table 22.

Table 22.

**Responses to Perceived Control Open-ended Questions**

<table>
<thead>
<tr>
<th>Category: Perceived control</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sub-Theme 1</strong></td>
</tr>
<tr>
<td>“If I work hard, I’ll get good grades.”</td>
</tr>
</tbody>
</table>

Examples of student statements:

- “If I work hard, my grade reflects it.”a
- “I think everyone has control over their grades.”a
- “You can control what you do more this year.”a
- “It all depends on how hard I work.”b
- “Kids who do work get the grades.”b
- “You are in charge of doing your work, but some teachers don’t follow up.”b
- “In chemistry, I study my hardest but I’m not given a chance to do better.”b
- “Your teacher is grading so your teacher can pretty much do whatever with your grade.”b
Perceived control. Transfer students’ ratings of perceived connection produced mean scores similar to those of continuously enrolled students, suggesting transfer students felt neither less connected nor more connected in their new, higher-functioning SLC than their continuously enrolled peers (M = 8.67, M = 8.60, respectively). When asked about perceived connection using a yes/no response format, 93% (n = 14/15) of transfer students indicated a strong sense of connection in their new SLC, while one transfer student (n = 1/15) reported feeling disconnected to others in the new SLC. Similar results were found among continuously enrolled students, as 100% of this group reported a strong sense of perceived connection. Students in both groups repeatedly cited friendships with peers as important to feeling a sense of connection.
Three themes emerged following open-ended questioning: (1) feeling connected and a sense of belonging at school; (2) feeling supported by friends; and (3) feeling supported by teachers. Student responses suggested most students from both groups felt connected to school through their strong relationships with peers and teachers. Within the transfer group, responses often referred to feeling more connected in their new SLC than their previous SLC. For example, most students reported feeling more comfortable and many reported they were treated better. Students in the continuously enrolled group did not compare their experiences to their previous year, suggesting their experience in the SLC remained fairly constant during both ninth and tenth grade. Responses to open-ended questions are displayed in Table 23.
Table 23.

*Responses to Perceived Connection Open-ended Questions*

<table>
<thead>
<tr>
<th>Sub-Theme 1</th>
<th>Sub-Theme 2</th>
<th>Sub-Theme 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>“I fit in and feel comfortable.”</td>
<td>“I have a lot of friends.”</td>
<td>“Teachers are encouraging.”</td>
</tr>
</tbody>
</table>

Examples of student statements

<table>
<thead>
<tr>
<th>“I just feel more comfortable this year.”&lt;sup&gt;a&lt;/sup&gt;</th>
<th>“I have friends in every level.”&lt;sup&gt;a&lt;/sup&gt;</th>
<th>“This is a good school and teachers and students show me love and give me support.”&lt;sup&gt;a&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>“I fit in now. I feel wanted this year; last year I didn’t.”&lt;sup&gt;a&lt;/sup&gt;</td>
<td>“I know more people now and have a lot of friends.”&lt;sup&gt;a&lt;/sup&gt;</td>
<td>“Teachers encourage me more than last year.”&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>“There’s lots of acceptance.”&lt;sup&gt;b&lt;/sup&gt;</td>
<td>“Lots of friends and I enjoy it here.”&lt;sup&gt;b&lt;/sup&gt;</td>
<td>“There is always someone there for you; we are a support team.”&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>“Sometimes I don’t think I fit in because the classes are hard and I don’t feel smart enough in them.”&lt;sup&gt;a&lt;/sup&gt;</td>
<td>“(Peers) want me to come back, unlike last year.”&lt;sup&gt;a&lt;/sup&gt;</td>
<td>“There’s a lot more acceptance here.”&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>“I used to get picked on but now I belong.”&lt;sup&gt;a&lt;/sup&gt;</td>
<td>“My group turns a day into something amazing.”&lt;sup&gt;b&lt;/sup&gt;</td>
<td>“Teachers encourage me more than last year.”&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>“This year I’m not thrown into the trash barrel when I’m walking in the hall.”&lt;sup&gt;a&lt;/sup&gt;</td>
<td>“I used to get picked on but now I belong.”&lt;sup&gt;a&lt;/sup&gt;</td>
<td>“I know how to do all the work now. Teachers are teaching better than last year.”&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>“Everyone expresses their individuality and know that others are doing so too.”&lt;sup&gt;b&lt;/sup&gt;</td>
<td>-</td>
<td>“Unlike teachers last year, they (now) say I have potential and tell me I’m a good student.”&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
</tbody>
</table>
Category: Perceived connection

<table>
<thead>
<tr>
<th>Sub-Theme 1</th>
<th>Sub-Theme 2</th>
<th>Sub-Theme 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>“I fit in and feel comfortable.”</td>
<td>“I have a lot of friends.”</td>
<td>“Teachers are encouraging.”</td>
</tr>
</tbody>
</table>

Examples of student statements

- “Everybody is nice, cultures get along, no segregation, no matter what color, race, or religion.”
- “I got put down about my skin tone last year, but this year that hasn’t happened in the new SLC.”
- “I used to get picked on but now I belong.”
- “I have great teachers.”
- “I get along with teachers; teachers seem to like me.”
- “Teachers want to know how you do inside and outside of school, and about you.”

Note: ^Transfer students. ~Continuously enrolled students.

Perceived effort. Perceived effort ratings suggested transfer group students perceived they worked as hard as their continuously enrolled peers during year 2 (M = 7.07, M = 7.38, respectively). Using a yes/no format, forty-seven percent (n = 7/15) of transfer students reported working hard for their grades in their new SLC, while 53% (n = 8/15) reported they did not work as hard as they should have. Similarly, of the continuously enrolled group, 50% of students reported working hard for their grades, while 50% of students reported they did not work as hard as they should have.

When asked open-ended questions about effort put forth, three sub-themes emerged: (1) students were hard working; (2) students should/could have worked harder; and (3) students were distracted from school work due to family obligations, sports, and
other extra-curricular activities. Both groups reported similar amounts of effort put forth, with the majority of students in each group reporting they worked hard for grades. Transfer group students frequently noted their effort was stronger during tenth grade in their new SLC than during ninth grade. Examples included, “I work harder this year than last year in the old program,” “I have to work hard this year; it’s really different than last year,” and “Last year school was too easy and I didn’t have to work at all. Now, I’m really working hard because the classes are tougher and more interesting.”

Of students reporting they did not work hard, reasons for not working hard varied between the two groups. Continuously enrolled students frequently reported that if they were not working hard, reasons included being distracted by family, jobs, social commitments, and other activities. Such reasons were not mentioned among transfer group students. Rather, students in the transfer group reporting low effort stated their reasons included putting off homework, “slacking off,” laziness, and frustration. Responses to open-ended questions are displayed in 24.
Table 24.

*Responses to Perceived Effort Open-ended Questions*

<table>
<thead>
<tr>
<th>Sub-Theme 1</th>
<th>Sub-Theme 2</th>
<th>Sub-Theme 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;I work hard in tenth grade.&quot;</td>
<td>&quot;I don’t work as hard as I could.&quot;</td>
<td>&quot;It’s tough to balance school and other commitments.&quot;</td>
</tr>
</tbody>
</table>

Examples of student statements

- "I work hard, do all my homework, maintain a C average."  
- "I really don’t do homework."  
- "It was hard to stay on task with sports and moving to a new house."  
- "I work pretty hard."  
- "I put off homework, could do a better job, forget about stuff."  
- "I could work hard, but I have too many activities and dance and sports."  
- "Last year I wasn’t doing too good. This year I changed, work harder."  
- "I had low motivation last year but this year has turned it around."  
- "I know I put friends and family first."  
- "This year the classes have more in them; you have to work pretty hard to pass."  
- "Sometimes I don’t get to it."  
- "I work hard."  
- "I didn’t work as hard until the middle of the year; towards the end I tried harder because I had bad grades."  
- "On some things I try my hardest, easier things like busy work I slack off."  
- "I slacked off more this year than last year."  
- "I devote a lot of time to my schoolwork."  
- "I got caught up with my friends and hanging out and didn’t work as hard as I could have."
### Category: Perceived Effort

<table>
<thead>
<tr>
<th>Sub-Theme 1</th>
<th>Sub-Theme 2</th>
<th>Sub-Theme 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>“I work hard in tenth grade.”</td>
<td>“I don’t work as hard as I could.”</td>
<td>“It’s tough to balance school and other commitments.”</td>
</tr>
</tbody>
</table>

#### Examples of student statements

| “I take school very seriously; school is the time to learn.”<sup>a</sup><sup>b</sup> | “I know I try hard but I don’t put in as much effort as I could.”<sup>b</sup> | |
| “My grades don’t have to do with teachers; it’s all about the effort I put in.”<sup>a</sup> | “I failed like five classes last year but this year I’m doing good.”<sup>a</sup> | |
| “In ninth grade classes were a lot less challenging so I could put a lot less effort in. It’s different this year.”<sup>a</sup> | | “This year it’s good. I slacked off in ninth grade for no particular reason.”<sup>a</sup> |

**Note:**<sup>a</sup>Transfer students. <sup>b</sup>Continuously enrolled students.

**Perceived competence.** Ninety-three percent of transfer students reported feeling competent as tenth graders (n = 14/15) while the remaining 7% (n = 1/15) rated their competence as “poor.” Similarly, 94% of tenth grade students in the continuously enrolled group reported feeling competent as tenth graders (n = 15/16) while one student rated perceived competence as “poor.” Students in the transfer group frequently referred to feeling more competent in their new SLC than during their ninth grade experience, reporting their previous SLC held a stigma related to student ability.
Perceived autonomy. Seventy-three percent (n = 11/15) of students in the transfer group believed they completed work primarily due to teacher encouragement. One student (7%) believed work was completed primarily due to enjoyment received from work completion. Three transfer students (n = 3/15, or 20%) chose both response options, stating they believed work completion occurred because of both choices (they were encouraged to do work and they enjoyed the work). Forty-four percent of continuously enrolled students believed work completion occurred primarily because of teacher encouragement (n = 7/16) while 25% (n = 4/16) believed they completed work due to enjoyment. Additionally, 31% of students (n = 5/16) believed they completed their work for both reasons. Transfer group students repeatedly reported they enjoyed doing their work more in their new SLC than during the previous year.

In closing, information on five variables of interest was collected from transfer and continuously enrolled students in different ways. A summary of all information follows. It is important to consider that these results are not evaluative. Results presented serve as perceptions students hold about themselves rather than what may be truly accurate. Additionally, an outlier was uncovered during qualitative data analysis due to one specific transfer student responding consistently in a negative direction to items addressing perceived control, perceived connection, and perceived competency.

Summary of perceived control. When students were asked if they perceived themselves to be the primary controller of grades assigned (or if teachers were perceived to be the primary controller of grades), mean scores were similar between transfer students and continuously enrolled students (M = 8.33, M = 7.94, respectively). Items using a yes/no response format suggested group differences, as 93% of transfer students
reported to be the primary controller of their grades while 69% of continuously enrolled students affirmed feeling in control of their grades. Open-ended questions revealed both groups experienced similar perceptions related to control over grades including perceived strong work habits, recognition that grades are based on effort, and feeling teachers have more control over grades than students. Notable within the transfer group was the finding that some students reported their previous SLC had an easier curriculum, resulting in greater perceptions of control over grades during ninth grade. Other transfer students reported they felt more in control in their new SLC due to the structure offered by program.

*Summary of perceived connection.* Mean scores obtained from student ratings indicated both groups produced similar results when asked about relationships with others ($M = 8.67$, $M = 8.60$ for the transfer group and continuously enrolled group, respectively). Items using a yes/no response format indicated similar findings, as 93% of transfer students perceived they had a strong sense of connection while 100% of continuously enrolled students believed their perceptions of connection were high. Open-ended questions revealed both groups perceived strong relationships with teachers/staff, peers, and family members. However, transfer students indicated remarkably different perceptions than continuously enrolled students regarding perceived connection based on SLC assignment. Many transfer students referred to their previous SLC by indicating they did not seem to fit in, experienced bullying due to the SLC assignment, and felt unwelcome at school. After these students experienced their new SLC they reported greater feelings of connection and acceptance.
Summary of perceived effort. Student ratings of effort put forth produced similar mean scores between both the transfer group ($M = 7.07$) and the continuously enrolled group ($M = 7.38$). Items using a yes/no response format indicated 47% of transfer group students reported working hard for their grades, which was similar to 50% of the continuously enrolled group’s endorsement of strong effort. Open-ended questions revealed while both groups put forth effort, transfer students reported putting forth more effort in their new SLC than they did previously. These students reported the previous academic year was less challenging, while the current year’s curriculum offered more academic rigor with stimulating course content.

Summary of perceived autonomy. Seventy-three percent of transfer group students indicated they completed work primarily because of teacher encouragement, or external factors, while one student (7%) reported work was completed primarily because the work was enjoyable, or due to internal factors. On the other hand, among continuously enrolled students, 25% of this group reported their work was completed primarily due to enjoyment, or intrinsically motivating reasons while 44% of this group reported their work was completed primarily due to teacher encouragement.

Summary of perceived competence. Both groups reported similar perceptions of competence. Of the transfer group, 93% of the students sampled reported perceptions of competence by indicating they were average, good, or excellent students, while 94% of continuously enrolled students reported such perceptions about their competence.

In addition to qualitative and quantitative results, observational findings cannot be overlooked. While gathering data inside the school, the primary investigator observed a discrepancy between the school’s public image and the actual conditions inside the
school. For example, SLCs had been promoted as limiting class size in order to offer students the opportunity to form relationships with their teachers. However, site visits to the school uncovered many class sizes larger than forty students, with some classes holding over sixty students. Students were observed sitting on the floor or on lawn chairs during their classes due to a lack of seating. Slavin (1990) has demonstrated that smaller classes have more positive effects on student achievement than larger classes, although the effects are small. For small learning communities, management of size is a key concept for implementing best practice.

Similar to inaccurately reported class size, concern was uncovered related to the school’s reported sizes of actual SLCs. The school district had touted its SLCs as being small and intimate. During 2005-2006, 377 freshman students comprised the two higher-functioning SLCs at the high school, while 73 freshman students were enrolled in the lower-functioning SLC. Proponents of SLCs view such enrollment numbers as being reasonable. By the 2006-2007 academic year, 373 sophomore students comprised the two higher-functioning SLCs, each augmented by the addition of 50 students assigned to either one higher-functioning SLC or the other. Consequently, a total of 423 sophomore students were divided among the two higher functioning SLCs at the school, which is in keeping with best practice related to SLC size. However, the principal researcher discovered that the school had reported its SLC sizes for this study based on freshman and sophomore enrollment numbers only; the school actually assigned students to SLCs for their entire high school career, not solely for their freshman and sophomore years. As a result, it became clear that SLC sizes were significantly larger than originally reported. During the 2006-2007 academic year 792 students in grades nine through twelve were
assigned to one of the higher functioning SLCs while 817 ninth through twelfth graders were assigned to the other higher functioning SLC.
CHAPTER 5

Discussion

The purpose of this study was to explore the effects student placement into a higher-quality small learning community on indicators of student progress.

Summary of Findings

Research Question 1: What are the effects of participation in a quality SLC on student progress?

Results indicate that enrollment in a quality SLC was beneficial to students previously enrolled in a low functioning SLC for one of twelve dependent variables. Student attendance rates in the transfer group increased significantly compared to student attendance rates in the continuous group during year 2, demonstrating an effect on this indicator of behavioral engagement. A medium effect size was observed, indicating practical significance. The finding is positive and noteworthy. Hypotheses regarding the reason(s) for improved attendance scores among the transfer group are warranted. The finding is consistent with literature on SLCs indicating smaller learning communities seek to foster a more personalized school experience with expectations of increased attendance rates (Oxley, 2005a). Current results are particularly interesting because when examining the dependent variables chosen for the study, it becomes apparent that demonstrating increases in performance is a difficult task to achieve (e.g., raising one’s GPA over one year is a large undertaking, since the results are cumulative). However, when considering attendance, it appears to be a variable that students would most likely be able to manipulate by volition. The utilization of volition appears to be the case for the transfer group based on quantitative findings. Likewise, qualitative findings from open-
ended questioning and private interviews suggested many transfer students enjoyed attending school more once they were moved to a different SLC.

The finding of increased attendance rate is particularly interesting because other issues may be present during high school that can deter attendance during tenth grade. A number of plausible reasons may lead to decreased attendance, not limited to but including developmental issues faced by today’s adolescents. There may be issues related to safety at school, socio-economic issues (e.g., assisting parent’s employment status by staying at home to provide child care for younger siblings), or other unknown possibilities. Further, students could have become less motivated to attend school during tenth grade since compulsory education mandates terminate in approximately 28 states (including the current study’s state-of-origin) once a student turns sixteen years of age (Education Commission of the States, 2005). The actual shift from age 15 to 16 typically occurs during tenth grade. Such issues did not appear to have an impact on students in the transfer group, and the finding of improved attendance suggests a need for additional research.

Large differences were not uncovered for remaining quantitative variables examined in this study. Beginning with GPA, the post-test mean of the transfer group was not significantly different from the post-test GPA mean of the continuously enrolled group. This suggests that the indicator used (GPA) did not reveal differences between students across two years. Similarly, for accrued credits, the post-test mean for the transfer group was not significantly different from the post-test mean for the continuously enrolled group, suggesting all students performed about the same on this indicator over two years.
Significant differences between groups were not uncovered from SLCSES results of teacher-student relationship mean scores, as results indicated enrollment in a higher functioning SLC did not improve students’ perceptions of relationships with teachers or with peers. Similar results were found when examining the amount of perceived support from families. Results indicated that enrolling students in a higher functioning SLC did not significantly improve students’ perceptions of support received from family. Likewise, results did not display differences related to perceptions of control and relevance of school work, indicating that enrolling students in a higher functioning SLC did not significantly change such perceptions. With regard to future aspirations and goals, significant results were not uncovered between post-test mean scores of each group. Overall, significant results were not found to support the hypothesis that enrollment in a higher-functioning SLC would result in increased outcomes on indicators of academic, affective, or cognitive engagement.

**Research Question 2: What are the differences in perceived control, perceived connection, perceived effort, perceptions of competence, and perceived autonomy between students reassigned to a quality SLC and students who continuously attended the quality SLC?**

Results of the Student SLC Interview were used to answer this research question. Both groups of students reported many comparable, positive responses when asked about their experiences during tenth grade. Students from the transfer group indicated feelings similar to those of the continuous group when asked about perceived connection and perceived effort based on mean score ratings for each group. Likewise, both groups of students rated amounts of perceived control similarly.
Using a dichotomous scoring method to ask students about their perceptions of academic competence, students from both groups overwhelmingly indicated they were average to high-performing students. In contrast, differences were uncovered related to perceived control between the two student groups using a dichotomous method. Surprisingly, more transfer group students felt they were the primary controller of their grades during tenth grade than continuously enrolled students. A likely assumption may have been that transfer students would experience lower amounts of perceived control (since they were new to their SLC in tenth grade) while continuously enrolled students would experience higher perceptions of control due to having experienced their second year in the SLC; it would have made sense that continuously enrolled students felt more at ease in their SLC and may have therefore felt more in control of their grades. Yet this was not the case and one may speculate why such results were obtained. It is possible transfer students felt less control in their previous SLC due to its lack of best practices, with a subsequent result of higher rates of perceived control due to placement in a well-functioning SLC.

With regard to perceived autonomy, results indicated more continuously enrolled students believed work was completed primarily due to enjoyment gained from doing the work. Fewer transfer group students indicated enjoyment as the primary reason for work completion. This finding is interesting and may be due to the effects of a cumulative amount of time spent in the higher-functioning SLC by continuously enrolled students. It is possible that two years spent in a rigorous, high-functioning SLC impacted continuously enrolled students with increases in intrinsically motivated learning. One can only speculate as to whether transfer students may experience increased desires to
complete work by experiencing more intrinsic motivation after extensive exposure (perhaps two or three years) to a higher-functioning SLC.

Open-ended questions provided rich details and insight into why students answered items as they did. Transfer group students repeatedly commented about feeling more connected during tenth grade than during ninth grade in their former SLC, citing unfortunate experiences such as discrimination, bullying, teasing, and differential treatment while in their former SLC. Such experiences did not continue once the students were placed in their new SLC. Similar findings were uncovered related to effort, where many transfer students indicated they worked more in their new SLC than during the previous year. The positive aspects of the new environment may have resulted in small increases in student’s motivation in their new SLC.

Finally, many positive results were uncovered by asking students open-ended questions about their sophomore year. For example, perceptions of competence were reported among the majority of students in both groups. Further, most students in each group felt a sense of belonging by feeling connected to others at school. Students from both groups appreciated efforts made by the school to enhance a sense of community. Similarly, many students in both groups reported they worked hard for their grades during tenth grade, while few students reported they did not work hard.

Merits and Limitations

This study contained a number of merits and limitations. One merit is the attempt made to empirically explore the effects of small learning communities, as to date anecdotal reports exist in the literature with sparse evidence of experimental or quasi-experimental designs. In the current study, a unique opportunity was utilized to
empirically investigate what happened when a school deemed an SLC to be under-
performing and chose to relocate its students into SLCs with proven track records of
academic success. As the only known study of its kind, it is hoped that results will be
useful to inform specific types of SLC decision-making as well as to shed light on some
of the issues that have previously been presented anecdotally. Additionally, a merit of the
study is reflected by the multiple methods of data collection used. Through student
interviews, teacher surveys, student questionnaires, archival data, observation, informal
staff interviews, and site visits the potential to omit key information from the sample was
reduced.

An additional merit is the inclusion of information collected from open-ended
items to research question two. Such items allowed students to provide opinions about the
positive and negative aspects of their SLC(s) and their perceptions and behaviors related
to school. By soliciting open-ended remarks, participants were allowed to generate their
own concerns rather than relying on the investigator’s hunches about student issues
related to their school experiences.

Another merit concerns the similarities between student interview results and
teacher survey results. Both groups produced similar findings related to disparities among
the two SLC models compared, offering strong support to the school district’s
assumption that transfer students had experienced a poorer-functioning SLC during ninth
grade. Further, regarding the disparity between SLC models, staff and student reports
added credibility to the original research questions, which were dependent upon SLC C
being indisputably unequal in quality.
Limitations of this study include the sample size. A limited sample size was attributable to the number of students enrolled in the poorer-functioning SLC remaining at the school in order to transfer to the higher-functioning SLCs as tenth graders. Low enrollment decreased the capacity of the primary investigator to gather information from more students and staff who originally attended the discontinued SLC. Additionally, five students were omitted from final quantitative data analysis due to responding to validity items poorly.

A further concern relates to instruments used in this study. While the Student SLC Interview was based on research related to student engagement and SLCs, the instrument was not norm-referenced. This possible limitation is also a concern when considering the Staff SLC Survey designed by the primary investigator. While the SSS relied upon theoretical key components for effective SLCs (with links to engagement theory) to create survey items, the instrument had not been used prior to the current study. The SLC Student Engagement Survey may also have limitations related to student attitudes and functioning. Participants completed the study during school hours and were encouraged to respond truthfully. Researchers explained the purpose of the study to students and stated individual responses would be kept confidential. Items on the instrument were designed to obtain data about relationship properties that involve interpersonal behavior (e.g., feelings of belongingness). Such items may be more likely to elicit responses that are biased due to issues of self-consciousness and feelings of embarrassment (Huston & Robins, 1982). It is possible that students’ responses on the instrument did not demonstrate actual levels of cognitive and affective engagement.
The major limitation of this study involved the use of a retrospective method. This method was necessary because the participants had already completed ninth grade and were at the end of their tenth grade year at the time of data collection. As a result, students were asked to answer questions related to their ninth grade academic year in a retrospective manner. While response-shift bias may theoretically be reduced due to a retrospective design, this method of data collection is typically considered to be less desirable than a more conventional method such as pre-test, observe, post-test data collection.

Limitations of the retrospective method must be acknowledged. First, demand characteristics may influence the recall process, as well as memory-related problems (Pratt et al., 2000). Demand characteristics may be a concern if participants have a desire to make a program look particularly good for various reasons such as school spirit, devotion to teachers, feelings about the self derived from school status, or social desirability to please the researcher (Lam & Bengo, 2003). Memory-related biases may be a concern due to asking participants to recall events after a lengthy period of time passed. The accuracy of recall stemming from self-report should be a matter of concern in a retrospective study. Self-reports are typically estimates, which may be biased (Howard & Dailey, 1979). Similarly, participants may experience cognitive dissonance that could explain differences in pre-test and post-test results rather than actual change or lack of change in the subject’s belief system (Howard & Dailey).

In order to gather more information about the validity and reliability of the retrospective method, future research may benefit from simultaneous collection of retrospective pre-test data and traditional pre- and post-test data. This approach would
allow comparisons of both methods. Clearly, there are numerous inherent problems with a retrospective design and the reader is cautioned to consider the retrospective method used when interpreting results from this study.

In addition to the limitations of a retrospective study, inherent limitations due to non-equivalent groups must also be addressed. Both groups differed at the outset of this study, which may result in difficulty interpreting test scores. Adjustments to correct pre-test scores, stratifying the sample groups, and ANCOVA likely corrected for inherent bias due to the Non-Equivalent Group Design (NEGD). Yet another issue that must be addressed is related to the problem of a maturation effect when using a non-equivalent group design. This occurs when participants in one group experience more growth, fatigue, or boredom than participants in the other group (Cook & Campbell, 1979). Further, such an effect is more likely to threaten internal validity when the treatment group is self-selected, which occurred in the current study due to pre-existing groups. It is possible that the natural growth rate of students in the continuously enrolled group exceeded the natural growth rate of transfer group students due to the former group’s ongoing familiarity with their SLC as second-year students at the school.

Another concern relates to local history effects (Cook & Campbell, 1979). It is possible that an event affected one SLC group and not the other. For example, transitioning from a familiar education program to a new program, even if the new program has been deemed higher-performing, can be a stressful event for many adolescents. This scenario was likely the case for some transfer group students in the current study. Thus, apparent history effects cannot be ruled out.
Differential statistical regression must also be considered, as controlling this in the nonequivalent group design can be difficult (Cook & Campbell, 1979; Shaughnessy et al., 2006). Regression toward the mean is to be expected when individuals produce extreme scores, which was more likely to occur in the transfer group. Thus, differential regression may occur when regression is more likely in one group than another. However, given that statistically significant findings of improvement in the transfer group were found in only one variable examined, this threat seems unlikely in the current study.

Another large limitation of the study concerns the non-random assignment of students to SLC groups. Groups were intact prior to the onset of the study, creating potential confounding due to pre-existing differences among students. This problem threatened the internal validity of the study but was unavoidable. Selection bias occurred when participants were originally placed in their ninth grade SLCs, since the procedures used to select students resulted in lower performing, lower SES student’s placement in the poorer functioning SLC. While the school used selection criteria when ninth graders began their high school career, selection criteria has since been discontinued. However, in the current study selection bias must be considered as a threat to internal validity.

Finally, while conducting the current study issues came to light that were unknown at the onset of the study related to class size and SLC size. Such large enrollments are not aligned with SLC key components of effectiveness and may have limited many of the benefits offered by more intimate smaller learning communities with lower enrollments. Thus, treatment fidelity must be considered in the study, as all SLCs involved experienced complications related to implementing Oxley’s key best practices (Oxley, 2005a).
Directions For Future Research

This study was a first step toward quantitatively analyzing SLC implementation results. Historically, SLC research has relied primarily on anecdotal reports claiming remarkable results. Such results must be regarded cautiously due to their anecdotal nature without empirical evidence to support their efficacy. The current study found a significant difference using empirical research for one dependent variable (attendance), which is noteworthy. There is a paucity of research related to SLCs, and the current study’s findings indicate this topic would benefit from further exploration and analysis.

This study involved urban students enrolled in one high school offering various small learning communities, limiting generalizations that may be made to other student groups. Replication of this study with a larger sample size may provide different outcomes. Further, examination of indicators related to student progress following longer exposure to high-quality programming such as three or four years may be beneficial. It is possible that many significant benefits to students may not be uncovered after only one year, and the current study may not have allowed students to experience an adequate passage of time to demonstrate significant changes in specific domains. It is also possible that perceptions may change more rapidly than measurable outcomes. Data collection throughout a student’s high school and college years may provide a different outcome with more positive effects. Thus, experimental longitudinal studies may be a future endeavor for research.

Future SLC research must be improved by using true experimental designs with random assignment to treatment or control group. Quasi-experimental designs may suffice as an alternative (though less desirable) option. Furthermore, multiple data
collection techniques should be utilized including observation. The current studys’ findings provide evidence for reasons to continue research into the efficacy of SLCs. It is possible that the benefit to students from supports found in a well implemented SLC, including academic supports and strong relationships, may be uncovered through future empirical research efforts. Additionally, prospective research efforts best include comparisons of SLCs not only to one another, but also to subjects enrolled in a traditional high school when examining student indicators of progress.

Implications for Practice and Policy

There are several implications to be drawn from the current study. While the need for continued research examining SLC efficacy continues, findings from the current study support what many educators already know, that engagement is a complex variable. There is reason to believe that by forming more intimate environments for students and allowing students to engage in rigorous courses, students will benefit. The current study may have uncovered more effects if entrance criteria had not been used for admittance into higher functioning SLCs, making the groups unequal. Further, the duration of time spent once students entered their new SLC may not have been long enough to measure significant gains. However, one thing is for sure; the implementation of educational models must follow best practice. Educators can rest assured that implementing programs such as the lower-functioning SLC in this study are beneficial to neither staff nor students, as evidenced by lower GPAs and number of credits accrued on pre-test scores for the transfer group in the current study. Clearly, the transfer group was comprised of a more challenging population. Further, programs best not use entrance criteria. Selection processes typically result in an absence of diversity, resulting in students being
surrounded by similar peers rather than a diverse group of peers with varying levels of ability, motivation, and other important attributes for school success. Instead of depending on arbitrary entrance criteria, student enrollment should be based on each student’s desire to be part of the specific community.

This study focused on an institutionally-imposed situation where ethical practices may have been compromised for students in one particular SLC due to segregation. While the specific SLC was dismantled, today’s educational communities must engage in self-monitoring to ensure that such practices cease. Valuable lessons have been learned from the current study. The purpose of the study was to examine variables of interest such as perceived connection, perceived effort, and other indicators of student engagement and student progress. In addition to the positive effect on student attendance based on quantitative data, qualitative data uncovered rich information related to student opinions and feelings. Particularly, students transferred into a higher-functioning program chose to disclose their negative experiences without prompting from interviewers. These students voluntarily stated how much better they felt in their new SLC. Specifically, they reported feeling more connected in their new SLC, putting forth more effort in their new SLC, enjoying completion of work more in the new SLC, and feeling more competent than they felt in the previous SLC. The students in this study, likely without realizing it, suggested several variables that educators should attend to when discussing successful implementation of educational practices: the majority of students placed into a higher-functioning learning community overwhelmingly expressed feelings of relief and experiences of equality. Evidently, students reacted by attending school more often. The voices of these students must be heard and not forgotten as educators continue to design
innovative ways to assist students in reaching their educational goals. The need for educators to consider the importance of friends, supportive teachers, and equality in the educational setting is paramount, as expressed by the students in the study.

Coincidentally, the importance of relationships has been one of the foundations of SLC implementation. Educators must pay attention to Oxley’s (2005a, 2006) organizational strategies, as her recommended practices focus primarily on the promotion of belongingness and a sense of community by: ensuring small size of the SLC, spending some hours daily in the SLC, remaining in the SLC for at least two years, collaborating with parents and the community, teaming teachers to share the same students, and enhancing personalization of the learning environment. It is no surprise students in the transfer group, once exposed to such practices in their new SLC, reported feeling included in the community because they likely knew they belonged there.

Finally, while the importance of belonging and connection is a foundation for SLCs, the reality of SLC implementation in the current Zeitgeist may be threatened. While SLCs appear to be a promising educational innovation, SLCs may have difficulty sustaining themselves without considerable financial support from external resources. Considering the current economic situation and ongoing budget constraints within education, a sound financial structure must be in place before considering SLC implementation.
REFERENCES


135
Understanding school adjustment (pp. 226-247). New York: Cambridge University Press.

APPENDIX A

Definitions Related to Cotton’s Essential Elements for Small Learning Communities
### Definitions Related to Cotton’s Essential Elements for Small Learning Communities

<table>
<thead>
<tr>
<th>SLC essential element</th>
<th>Cotton’s definition of the SLC essential element</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autonomy</td>
<td>Small schools granted autonomy are allowed to bring their ideas to fruition, as members are more invested in the school and student. SLCs need autonomy to succeed. Centralized districts may undermine independence by maintaining control over supplies, schedules, etc.</td>
</tr>
<tr>
<td>Separateness and distinctiveness</td>
<td>Separateness refers to physical space as well as the separateness required to instill a sense of school climate. Distinctiveness allows the SLC to set itself apart by establishing what makes it special.</td>
</tr>
<tr>
<td>Self-selection of teachers and students</td>
<td>The most successful SLCs are comprised of teachers and students who choose to be members.</td>
</tr>
<tr>
<td>Flexible scheduling</td>
<td>Flexible scheduling allows everyone involved to make time for common planning times and sustained blocks of instructional time. Flexible time allows for deeper levels of teaching and learning.</td>
</tr>
<tr>
<td>SLC essential element</td>
<td>Cotton’s definition of the SLC essential element</td>
</tr>
<tr>
<td>----------------------</td>
<td>------------------------------------------------</td>
</tr>
<tr>
<td>Vision/mission</td>
<td>All stakeholders must be involved in the school’s vision, while successful SLCs typically have a thematic focus or mission. This may include a career area or other common interest area.</td>
</tr>
<tr>
<td>Focus on student learning</td>
<td>SLCs cannot stop at simply creating pleasant climates; serious academic work must be fostered through rigorous coursework and high academic expectations with documented success.</td>
</tr>
<tr>
<td>Detailed planning</td>
<td>Key factors for planning a new school must be laid out before implementation; planning must be clear, concrete, and detailed.</td>
</tr>
<tr>
<td>Knowing students well</td>
<td>A commitment to knowing each student individually is key. Ideally, every student is known well by more than one adult in the school.</td>
</tr>
<tr>
<td>Heterogeneity/non-tracking</td>
<td>Academic tracking is not implemented; low-track classes typically offer less stimulation to students while sealing a student’s destiny by predicting academic outcomes.</td>
</tr>
<tr>
<td>SLC essential element</td>
<td>Cotton’s definition of the SLC essential element</td>
</tr>
<tr>
<td>------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Looping</td>
<td>Groups of students remain with the same teachers for more than one year. Students and teachers are more likely to get to know one another.</td>
</tr>
<tr>
<td>Parent and community</td>
<td>Parent involvement provides a sense of community, and often parents are involved in running the school. It is paramount that advisors and parents communicate regularly about student learning.</td>
</tr>
<tr>
<td>Leadership/decision making</td>
<td>Leaders teach and teachers enact administrative decisions in order to empower teachers while freeing up administrators’ schedules. Decision making is shared.</td>
</tr>
<tr>
<td>Professional development and collaboration</td>
<td>Provision of adequate time for teacher collaboration and planning cannot be overemphasized. Also, strong programs of professional development lead to improved growth outcomes for teachers.</td>
</tr>
<tr>
<td>SLC essential element</td>
<td>Cotton’s definition of the SLC essential element</td>
</tr>
<tr>
<td>----------------------</td>
<td>------------------------------------------------</td>
</tr>
<tr>
<td>Integrated curriculum/teaching teams</td>
<td>Teachers team together to cover similar topics in different modalities. For example, during Language Arts class students may read a classic novel, while during history class students may study the era in which the novel was portrayed.</td>
</tr>
<tr>
<td>Multiple forms of assessment</td>
<td>Creative assessment techniques include student portfolios and exhibitions; the use of multiple indicators and multiple instruments is also important.</td>
</tr>
<tr>
<td>Districts, boards, and legislators</td>
<td>SLCs must have the support of administration as well as leaders in the community and region.</td>
</tr>
<tr>
<td>Networking with other SLCs</td>
<td>Networks provide each SLC with other like-minded schools, reducing isolation and encouraging younger SLCs to take risks in pursuing innovative ideas.</td>
</tr>
<tr>
<td>SLC essential element</td>
<td>Cotton’s definition of the SLC essential element</td>
</tr>
<tr>
<td>----------------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>Thorough implementation</td>
<td>SLCs are encouraged to implement as many of the key practices identified by Cotton (2001) as they can, as soon as they can. Half-hearted implementation of the SLC concept will result in disappointing results.</td>
</tr>
</tbody>
</table>
Good afternoon and welcome. My name is Cheryl Bemel and I am from the University of Minnesota.

Thank you so much for coming here today to listen to what I have to say.

A group of researchers at the University would like to know your thoughts about your experience at _____ High during this school year as well as last year. It is especially important to get the opinions of students, because [your school district] wants to know how your school is meeting your needs.

You are here today because you have been at ______ High School for at least two years. Some of you have always been in [SLC A], some of you have always been in [SLC C], and some of you have been in [SLC C] and are now in either [SLC A] or [SLC C].

Today you will be asked to answer questions about your SLC or SLCs at _____ High. There are no right or wrong answers. The results will be used to help the school district better meet the needs of high school students, and particularly those students at _____.

Your responses will be completely confidential, or private. The summary reports that I will prepare will not identify any individuals. Names will not be used, and nobody except for me and a research assistant at the University of Minnesota will see your answers.

Before we start, please read the pink piece of paper in front of you.

Signing the form means that you have read it and that you are willing to be in the study.

Once you have signed the form, please put it underneath the white sheets you have and we will begin.

We will go through the questions together. As you will see, items are different than most questions you’ve been asked about school because you are asked to answer about BOTH last year AND this year.

So please look at page 1 of your survey. Let’s start with item “A”, what SLC were you enrolled in last year? If you don’t know, put ‘I don’t know’. Otherwise, put [SLC A], [SLC C], or [SLC C].

Next, answer what SLC you are enrolled in Now. And if you don’t know, put ‘I don’t know’.

On this instrument, each item will ask you if you disagree or agree with a statement.
Your choices are: strongly disagree, disagree, agree, or strongly agree.

Now let’s look at the sample on page 1 of your survey. Please find the box that says “sample” and look at the item with a ‘little i’. It says, “I do a sport at school.” First, please answer the question for LAST YEAR; make the question past tense in your mind, like “I did a sport last year at school.” So, if you did a sport last year, you would answer either “agree” or “strongly agree” by filling in the box with your pencil. If you did not do a sport at school last year, then fill in the ‘disagree’ or ‘strongly disagree’ box.

Next, please answer the question for NOW. Let’s say that you have done a sport this year at school. Then, you would answer either ‘strongly agree’ or ‘agree’….whatever one you wish. Any questions?

Now, let’s do the next sample question. “I watch American Idol.” If you do watch American Idol, you can color in the box below either ‘agree’ or strongly agree’, and if you don’t watch it, then color in the box under ‘strongly disagree’ or disagree’. Are there any questions?

OK, so when you begin, please read each statement and then rate your level of agreement twice: Once for Last year in your SLC and once for NOW in your SLC. Remember there are no right or wrong answers so just respond as you really feel.

Each time this survey is administered to students, it must be given to students the exact same way. So, we will go through it together as a group. But if you want to read ahead and answer the questions, that is OK too. Then, please wait when you are done until the rest of the group finishes.
**Student Survey (SLCSES)**

**PLEASE ANSWER THESE QUESTIONS ABOUT YOURSELF AND YOUR SMALL LEARNING COMMUNITY.**

A. What SLC are you enrolled in **NOW?**
   
   *(If you don’t know, write “I don’t know”)*

B. What SLC were you enrolled in **LAST YEAR?**
   
   *(If you don’t know, write “I don’t know”)*

C. Please write your name and student ID number (if you know your ID number).
   
   **Name:**__________________________
   
   **ID number:**____________________

**Directions:** Place an ‘X’ in the box that best describes you. First, for **NOW**, and then for **LAST YEAR.**

<table>
<thead>
<tr>
<th>Questions</th>
<th>(When)</th>
<th>Strongly disagree</th>
<th>disagree</th>
<th>agree</th>
<th>strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>i. I do a sport at school.</td>
<td>NOW</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td></td>
<td>LAST</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>ii. I watch American Idol.</td>
<td>NOW</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td></td>
<td>LAST</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Questions</td>
<td>(WHEN)</td>
<td>STRONGLY DISAGREE</td>
<td>DISAGREE</td>
<td>AGREE</td>
<td>STRONGLY AGREE</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>----------------------</td>
<td>-------------------</td>
<td>----------</td>
<td>-------</td>
<td>----------------</td>
</tr>
<tr>
<td>1. My family/guardian(s) are there for me when I need them.</td>
<td>NOW</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LAST YEAR</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. After finishing my schoolwork I check it over to see if it’s correct.</td>
<td>NOW</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LAST YEAR</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. My teachers are there for me when I need them.</td>
<td>NOW</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LAST YEAR</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Other students here like me the way I am.</td>
<td>NOW</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LAST YEAR</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Adults at my school listen to the students.</td>
<td>NOW</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LAST YEAR</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Other students at school care about me.</td>
<td>NOW</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LAST YEAR</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Students at my school are there for me when I need them.</td>
<td>NOW</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LAST YEAR</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. My education will create many future opportunities for me.</td>
<td>NOW</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LAST YEAR</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Most of what is important to know you learn in school.</td>
<td>NOW</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LAST YEAR</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Questions</td>
<td>(WHEN)</td>
<td>STRONGLY DISAGREE</td>
<td>DISAGREE</td>
<td>AGREE</td>
<td>STRONGLY AGREE</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>--------------</td>
<td>-------------------</td>
<td>----------</td>
<td>-------</td>
<td>---------------</td>
</tr>
<tr>
<td>10. The school rules are fair.</td>
<td>NOW</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td></td>
<td>LAST YEAR</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>11. Going to school after high school is important.</td>
<td>NOW</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td></td>
<td>LAST YEAR</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>12. When something good happens at school, my family/guardian(s) want to know about it.</td>
<td>NOW</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td></td>
<td>LAST YEAR</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>13. Most teachers at my school are interested in me as a person, not just as a student.</td>
<td>NOW</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td></td>
<td>LAST YEAR</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>14. Students here respect what I have to say.</td>
<td>NOW</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td></td>
<td>LAST YEAR</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>15. When I do schoolwork I check to see whether I understand what I'm doing.</td>
<td>NOW</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td></td>
<td>LAST YEAR</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>16. Overall, my teachers are open and honest with me.</td>
<td>NOW</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td></td>
<td>LAST YEAR</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>17. I plan to continue my education following high school.</td>
<td>NOW</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td></td>
<td>LAST YEAR</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>18. When asked to fill out a survey, I will pay attention and answer each item.</td>
<td>NOW</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td></td>
<td>LAST YEAR</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Questions</td>
<td>(WHEN)</td>
<td>STRONGLY DISAGREE</td>
<td>DISAGREE</td>
<td>AGREE</td>
<td>STRONGLY AGREE</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>-----------------</td>
<td>-------------------</td>
<td>----------</td>
<td>-------</td>
<td>----------------</td>
</tr>
<tr>
<td>19. I’ll learn, but only if the teacher gives me a reward.</td>
<td>NOW</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>LAST YEAR</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>20. School is important for achieving my future goals.</td>
<td>NOW</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>LAST YEAR</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>21. When I have problems at school my family/guardian(s) are willing to help me.</td>
<td>NOW</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>LAST YEAR</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>22. Overall, adults at my school treat students fairly.</td>
<td>NOW</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>LAST YEAR</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>23. I enjoy talking to the teachers here.</td>
<td>NOW</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>LAST YEAR</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>24. I enjoy talking to the students here.</td>
<td>NOW</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>LAST YEAR</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>25. I have some friends at school.</td>
<td>NOW</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>LAST YEAR</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>26. When I do well in school it’s because I work hard.</td>
<td>NOW</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>LAST YEAR</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>27. The tests in my classes do a good job of measuring what I’m able to do.</td>
<td>NOW</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>LAST YEAR</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Questions</td>
<td>(WHEN)</td>
<td>STRONGLY DISAGREE</td>
<td>DISAGREE</td>
<td>AGREE</td>
<td>STRONGLY AGREE</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------</td>
<td>--------------</td>
<td>-------------------</td>
<td>----------</td>
<td>-------</td>
<td>----------------</td>
</tr>
<tr>
<td>28. I feel safe at school.</td>
<td>NOW</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>LAST YEAR</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>29. I feel like I have a say about what happens to me at school.</td>
<td>NOW</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>LAST YEAR</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>30. My family/guardian(s) want me to keep trying when things are tough at school.</td>
<td>NOW</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>LAST YEAR</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>31. I am hopeful about my future.</td>
<td>NOW</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>LAST YEAR</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>32. At my school, teachers care about students.</td>
<td>NOW</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>LAST YEAR</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>33. I'll learn but only if my family/guardian(s) give me a reward.</td>
<td>NOW</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>LAST YEAR</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>34. When asked to complete a survey like the one I am working on right now, I will give it my best effort.</td>
<td>NOW</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>LAST YEAR</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>35. Learning is fun because I get better at something.</td>
<td>NOW</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>LAST YEAR</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>36. What I am learning in my classes will be important in my future.</td>
<td>NOW</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>LAST YEAR</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>
37. The grades in my classes do a good job of measuring what I am able to do.

<table>
<thead>
<tr>
<th>Questions</th>
<th>(WHEN)</th>
<th>STRONGLY DISAGREE</th>
<th>DISAGREE</th>
<th>AGREE</th>
<th>STRONGLY AGREE</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOW</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>LAST YEAR</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
APPENDIX C

Student SLC Interview (SSI)
Student SLC Interview (SSI)
Post-Retrospective Student Interview at [_____] High School 2007

Interviewer: __________________________

1. What is your name? __________________________

2. ID number? __________________________

3. What SLC are you in this year? __________________________

4. What SLC were you in last year? __________________________

5. How are things going for you here at _____? Is there anything that stands out as going especially well for you?

I’d like to ask you questions about your high school experience. First, I will ask you about this year in 10th grade, and then I’ll ask you about last year in 9th grade. If you are uncomfortable with any question, you don’t have to answer it. Do you have any questions before we begin?

<table>
<thead>
<tr>
<th>As a 10th grader, do you feel you work hard at school? (Yes or No)</th>
<th>Interviewer: write down student’s response</th>
</tr>
</thead>
</table>

6. I’d like to ask you about 10th grade regarding the effort you put forth on your school work at _____, both during the school day and after school for homework. How much effort do you feel you expend this year in 10th grade: a little or a lot? Please look at the chart on the next page, where 1 means you put forth no effort and 10 means you put forth a lot of effort meaning you work very hard at your schoolwork. What number is right for you?
“Please place an “X” on the arrow as to how much effort you put forward at school and during homework as a 10th grader.

1 2 3 4 5 6 7 8 9 10

1 2 3 4 5 6 7 8 9 10

I do not put forth effort on my school work or on homework.  I work a medium amount of effort at school and on homework.  I work my hardest.
7. Please explain why you gave the rating you just did for effort. Why do you feel your effort is at the ____ level as a 10th grader? Is there anything else? **Interviewer: write down student’s response**

Now I’d like to ask you these questions for LAST YEAR as a 9th grade student.

<table>
<thead>
<tr>
<th>Question</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you feel you worked hard at school as a 9th grader? (Yes or No)</td>
<td></td>
</tr>
</tbody>
</table>

**Interviewer: write down student’s response**

8. How much effort do you feel you put forth last year as a 9th grader: a little or a lot? Please look at the chart on the next page, where 1 means you put forth no effort and 10 means you put forth a lot of effort in 9th grade. What number is right for you?
“Please place an “X” on the arrow as to how much effort you put forward at school and during homework last year as a 9th grade student at _____.”

I do not put forth effort on my school work or on homework.

I work a medium amount of effort at school and on homework.

I work my hardest.
9. Please explain why you gave the rating you just did for effort last year as a 9th grader. Why do you feel your effort was at the _____ level last year? Is there anything else?  

Interviewer: write down student’s response

Now we’re going to talk about 10th grade again, the grade you are almost going to be done with!

10. As a 10th grader, do you feel as if you have some control over your grades here at _____? (Yes or No)  

Interviewer: write down student’s response

11. I’d like you to rate on a scale from 1-10 with 1 being low and 10 being high as to how much control you feel you have had over your grades at _____ this year as a 10th grader. One means you feel you have NO control over your grades at _____ this year as a 10th grader. Ten means you feel you can very much control the grades you get, based on your output of work. What number between 1 and 10 is right for you this year as a 10th grader?
As a 10th grader,

1  2  3  4  5  6  7  8  9  10

I have no control over my grades at school. Teachers assign grades and I have nothing to do with what grades they assign me.

I have some control of my grades at school. I have a lot of control the grades I get. teachers assign grades and I have a lot of power re: what those grades will be based on what I do or don’t do.
12. Why did you give the rating you gave for how much control you have over your grades? What is it about ____ that led to this rating? Is there anything else?

Interviewer: write down student’s response

Now I’d like to ask you again about NINTH grade.

Do you feel as if you had some control over your grades as a 9th grader here at _____? (Yes or No)

Interviewer: write down student’s response

13. Please rate on a scale from 1-10 with 1 being low and 10 being high as to how much control you felt you had over your grades at _____ LAST year as a 9th grader. One means you felt you had NO control over your grades at _____ last year as a 9th grader. Ten means you felt you could control the grades you got based on your output of work. What number between 1 and 10 was right for you last year as a 9th grader?
“Please place an “X” on the arrow as to how much control you felt you had over your grades.”

In 9th grade I had no control over my grades at school. Teachers assigned grades and I had nothing to do with what grades they assigned me.

I had some control of my grades at school as a 9th grader. Teachers assigned me grades and I had a lot of power regarding what those grades would be based on what I did or did not do.

I had a lot of control over the grades I got in 9th.
14. Why did you give the rating you gave for 9th grade? What is it about _____ that led to this rating? Is there anything else?  

| Interviewer: write down student’s response |

**OK, we’re back to talking about 10th grade.**

Now I’d like to know about why you work the amount that you work at school **this year in 10th grade**. For the next statement, please provide your answer by choosing one of the numbers provided.

1. If the statement does not fit you at all, place a “1” by the statement.
2. If the statement fits you “OK,” place a “2” by the statement.
3. If the statement fits perfectly for you, place a “3” by the statement.

15. The amount of work I have done this year at school as a 10th grader occurred because I care about my future. ________

(1, 2, or 3)
1= Statement DOES NOT fit me at all
2= statement fits me ‘OK’
3= Statement fits me perfectly

16. During 10th grade, Do you work at your school work mostly because a) you are forced to do so, or because b) you enjoy learning? (repeat the question again and then wait for response) ________

Note: IF STUDENT says “Both” without prompting, write down “both.” If student says both, ask which one is first and which one is second.
17. During 10\textsuperscript{th} grade, do you do your school work mostly because a) your teacher or teachers encourage/makes you do it, or because b) you just enjoy doing your work? ________

Note: IF STUDENT says “Both” without prompting, write down “both.” If student says both, ask which one (a or b) is first and which one is second.

Now I’ll be asking you about last year in 9\textsuperscript{th} grade. Please rank the following statement by choosing number 1, 2, or 3.

1. If the statement does not fit you at all, place a “1” by the statement.
2. If the statement fits you “OK,” place a “2” by the statement.
3. If the statement fits perfectly for you, place a “3” by the statement.

18. The amount of work I did last year at school as a 9\textsuperscript{th} grader occurred because I cared about my future. ________

(1, 2, or 3)

1= Statement DOES NOT fit at all for last year
2= statement fits ‘OK’ for last year
3= Statement fits perfectly for last year

19. During 9\textsuperscript{th} grade, did you work at your school work mostly because a) you were forced to do so, or because b) you enjoyed learning? (repeat the question again and then wait for response)_______

Note: IF STUDENT says “Both” without prompting, write down “both.” If student says both, ask which one is first and which one is second.
20. During 9th grade, did you work at your school work mostly because a) your teacher or teachers encouraged/made you do your work, or b) because you just enjoyed doing your work? _______

Note: IF STUDENT says “Both” without prompting, write down “both.” If student says both, ask which one is first and which one is second.

21. Now I’d like to ask you how you feel about your ability as a student. During 10th grade, please choose an answer to describe your ability as a student.

   a. In 10th grade think I have been a poor student .
   b. In 10th grade think I have been an average student .
   c. In 10th grade think I have been a good student .
   d. In 10th grade think I have been an excellent student .

22. OK, Now I’d like to ask you these same questions from when you were a 9th grader at _____ last year.

   e. In 9th grade think I have been a poor student .
   f. In 9th grade think I have been an average student.
   g. In 9th grade think I have been a good student .
   h. In 9th grade think I have been an excellent student .
Now I’d like to ask you about how you feel you fit in here at ______ this year as a 10th grader.

| As a 10th grader, do you feel a sense of belonging or ‘fitting in’ at school? (Yes or No) | Interviewer: write down student’s response |

23. I’d like you to rate on a scale from 1-10 with 1 being low and 10 being high as to how you fit in or belong in your SLC IN 10TH GRADE. Again, 1 means you feel you don’t belong at all and 10 means you belong to the highest degree possible. What number between 1 and 10 is right for you in 10TH GRADE? Please look at the visual before you give me your answer.

(Show student the visual on the next page)
“Please place an “X” on the arrow as to how you feel about the way you fit in at school this year.”

1  2  3  4  5  6  7  8  9  10

1  2  3  4  5  6  7  8  9  10

I don’t fit in at all and I feel I don’t belong at this school.

I fit in OK. My fit to this school is not low and it is not high; it is in the middle.

I feel I fit in very well here at school and I belong here and nowhere else; this school is a perfect fit for me.
<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>24.</td>
<td>Why are you giving the number you chose? Is there anything else?</td>
<td>10th grade</td>
</tr>
<tr>
<td>25.</td>
<td>What would it take to bring this number up?</td>
<td>10th grade</td>
</tr>
<tr>
<td>26.</td>
<td>What are some things that make you rate your feeling of fitting in at the ___ level?</td>
<td>10th grade</td>
</tr>
<tr>
<td>27.</td>
<td>Anything else? Are there other things that may affect your ratings of fitting in at ______?</td>
<td>10th grade</td>
</tr>
<tr>
<td>28.</td>
<td>Is there anything teachers do or say that lead to your rating for this year?</td>
<td>10th grade</td>
</tr>
<tr>
<td>29.</td>
<td>Is there anything peers do or say that lead to your rating for this year?</td>
<td>10th grade</td>
</tr>
<tr>
<td>30.</td>
<td>How do peers affect your feelings of belonging or fitting in this year?</td>
<td>10th grade</td>
</tr>
<tr>
<td>31.</td>
<td>What other things have gone on at _____ this year to make you rate yourself at #___?</td>
<td>10th grade</td>
</tr>
</tbody>
</table>
32. Now, I’d like you to answer the same questions, but this time thinking about LAST YEAR as a 9th GRADER.

| Do you feel you had a sense of belonging or ‘fitting in’ at school as a 9th grader? (Yes or No) | **Interviewer**: write down student’s response |

33. Please rate how you fit in or belonged in your SLC last year. What number between 1 and 10 is right for you FOR 9TH GRADE? Please look at the visual before you give me your answer.
“Please place an “X” on the arrow as to how you feel about the way you fit in at school in 9th grade.”

I didn’t fit in at all in 9th grade and I didn’t feel I belonged at (name of school).

I fit in OK last year in 9th grade. My fit to school was not low and it was not high; It was in the middle.

Last year in 9th grade I fit in very well and I belonged here and nowhere else.
<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>34.</td>
<td>Why are you giving the number you chose for last year?</td>
<td>9th grade</td>
</tr>
<tr>
<td>35.</td>
<td>What would it take to bring this number up?</td>
<td>9th grade</td>
</tr>
<tr>
<td>36.</td>
<td>What are some things that make you rate your feeling of fitting in at the ___ level as a 9th grader?</td>
<td>9th grade</td>
</tr>
<tr>
<td>37.</td>
<td>Anything else? Are there other things that may have affected your ratings of fitting in at _____ last year as a 9th grader?</td>
<td>9th grade</td>
</tr>
<tr>
<td>38.</td>
<td>Is there anything teachers did or said that lead to your rating for last year?</td>
<td>9th grade</td>
</tr>
<tr>
<td>39.</td>
<td>Is there anything peers did or said that lead to your rating for last year?</td>
<td>9th grade</td>
</tr>
<tr>
<td>40.</td>
<td>How did peers affect your feelings of belonging or fitting in last year?</td>
<td>9th grade</td>
</tr>
<tr>
<td>41.</td>
<td>What other things happened at _____ last year to have made you rate yourself at #___?</td>
<td>9th grade</td>
</tr>
</tbody>
</table>
APPENDIX D

Staff SLC Survey (SSS)

Directions: I would like to know your perceptions regarding _____ High School during this current school year as well as during the last school year.

It is especially important to get the opinions of staff. You will be asked questions about your impressions and perceptions regarding ______, its students, and staff day-to-day operations, including questions about teaming, physical space, staff assignments, student assignments and similar questions.

I am extremely grateful for your time and attention in completing this survey. Please keep in mind there are no right or wrong answers; you are being asked your opinions, perceptions, and impressions in this survey.

------------------------------------------------------------------------------------------------------------

1. To start, with, I’d like to know what SLC or SLCs you taught in or worked with LAST YEAR (if you know).
   a) [SLC A]  b) [SLC C]  c) [SLC C]  d) none of these  e) more than one SLC*
   _____, _____

2. This year what SLC or SLCs do you work with?
   a) [SLC A]  b) [SLC C]  c) [SLC C]  d) none of these  e) more than 1 SLC*
   _____, _____

The next set of questions are about your opinions of the [SLC C] small learning community at ______ last year. These questions will ONLY be directed to the [SLC C] SLC last year and your knowledge/thoughts about it.

3. What did you especially like about [SLC C] and why did you like it?

   __________________________________________________________________________

4. (If answered question #3) Why do you think this helped students?

   __________________________________________________________________________

5. Is there anything else that comes to mind about what you particularly liked about [SLC C]? (list as many responses as you wish).

   __________________________________________________________________________
6. What did you not like about [SLC C] and why did you not like it?

_________________________________________________________

7. (If you answered question #6) Why did you think this did not help students?

_________________________________________________________

8. Is there anything else that comes to mind about what you did not like about [SLC C]?

_________________________________________________________

9. From what you saw, did students in [SLC C] last year seem to feel they were supported and belonged at ______? Please explain your answer.

_________________________________________________________

10. From what you saw, how much time was staff in [SLC C] able to spend together planning curriculum and discussing student progress?

_________________________________________________________

11. Were staff able to spend common prep times doing this, or other common times, or were meetings more “on the fly”? During school or during non-school hours? During lunch?

_________________________________________________________

12. Did specific [SLC C] classes encompass at least a half-day block of students’ instructional day? Less than a half-day block? Please explain.

_________________________________________________________

13. Were teachers able to meet specifically with [SLC C] students last year in order to work towards a sense of community? Was there time for this? When?

_________________________________________________________

14. From what you could tell, how did students in [SLC C] seem to feel about being a [SLC C] student? What types of feelings come to your mind: proud/ashamed/OK/neutral/etc?

_________________________________________________________
15. Was the [SLC C] SLC diverse in its student population? Please be specific.

_________________________________________________________

16. From what you could tell, did [SLC C] students and adults appear to care about each other, and was there a sense of community?

_________________________________________________________

17. How did students and adults outside of the [SLC C] SLC (e.g., those in SLC A and SLC B) treat/interact with [SLC C] students?

_________________________________________________________ (Please explain)

18. From what you could tell, did students in [SLC C] last year seem to feel welcome in their SLC?

_________________________________________________________

19. Did you feel the quality of students’ relationships with peers was inadequate, adequate or more than adequate in [SLC C] last year?

_________________________________________________________

20. Did you feel the quality of students’ relationships with teachers was inadequate, adequate, or more than adequate in [SLC C] last year?

_________________________________________________________

21. Did [SLC C] teachers seem to meet regularly with groups of [SLC C] students for guidance and community-building other than during classes?

_________________________________________________________

22. Were teachers assigned half-time to the [SLC C] SLC? Less than that? How much time?

_________________________________________________________

23. If there were [SLC C] teacher team meetings, were they comprised of teachers who shared students in common?

_________________________________________________________
24. Did students in [SLC C] seem to know which SLC they belonged to? Or might they often say “I don’t know” when asked what SLC they were in?

25. Were specific school counselors assigned specifically to [SLC C]?

26. Did students remain in [SLC C] for at least two years? (that is, until the SLC was discontinued).

27. Was time reserved for teacher’s [SLC C] planning time during the school day at least once per week?

28. Was there physical proximity of [SLC C]’s various classrooms?

29. Were special education instructors and English Language Learner instructors integral members of the [SLC C] SLC?

30. Did teams of teachers share the same students?

THANK YOU FOR YOUR TIME
APPENDIX E

Permission Letters

(To teachers at ________ High School)

Monday May 14, 2007

Dear ________ Teacher,

This note regards the envelope(s) placed in your box this morning.

I am a researcher from the University of Minnesota and have been working with the ________ Leadership Team and the Research/Evaluation Department at ________ [school district] to complete my dissertation research at ________. In return, I will provide ________ with useful data on its Small Learning Communities.

I will be administering a survey this Friday to many of the 10th grade students at ________. In order to conduct my research, I must obtain parent permission.

I have placed permission letters in your box for the students I will be surveying. These students are in your first hour class. Don’t worry, they won’t be missing your 1st hour class on Friday to complete the survey! (They will be missing part of their 6th hour class on Friday to complete the survey).

PLEASE HAND OUT THE ENVELOPES TO THE IDENTIFIED STUDENTS IN YOUR FIRST HOUR CLASS TOMORROW MORNING, TUESDAY MAY 15TH. Advise the students to take the envelope home to share with their parent(s)/guardian(s).

If for some reason you cannot distribute the letters tomorrow, then please distribute them on Wednesday. It is important that parents are aware their students are being surveyed, as parents can decline their child’s participation.

Thank you in advance for getting the letters to your students during first hour tomorrow.

If you have any questions or concerns, please feel free to contact me at beme0005@umn.edu or (612) 803 3018.

Sincerely,
Cheryl Bemel, Ed S, NCSP, LP
Nationally Certified School Psychologist
Licensed Psychologist
School Psychologist, Minneapolis Public Schools
Graduate student, University of Minnesota, Educational Psychology

173
Letter of Notification to Parent/Guardian Regarding Student Survey

Dear Parent or Guardian,

May, 2007

Your son/daughter has been invited to be in a research study of his/her small learning community experience. The study is being conducted by the Center for Applied Research and Educational Improvement, College of Education and Human Development, at the University of Minnesota in order to document the effectiveness of small learning communities (SLCs).

It is important that the school has the opinions of the students. Your child is one of many students that have been selected as a possible participant to complete a written questionnaire about his or her experience in _____ High School’s small learning communities. The survey will take approximately ten to fifteen minutes to complete. Participation is voluntary and risks are less than minimal.

Any information obtained from the survey will remain confidential. Students will be asked about their small learning community during this school year (2006-2007) and also during the past school year (2005-2006). Students will be asked about their educational experience such as how connected they feel to school, what their relationships are like with teachers and peers, how the feel about school rules, and similar questions about opinions and beliefs regarding their particular small learning community.

Survey responses will be confidential. In any report we might publish, we will not include information that will make it possible to identify any specific person. Research records will be kept in a locked file cabinet; only researchers will have access to the records. The survey will be administered to groups of students in the conference room across from the school’s main office. If students are scheduled during a class period, they will need to arrange with the teacher to make up the work missed. Teachers have agreed to cooperate so that your son/daughter’s grade will not be affected.

If you would like to ask questions, you may call the assistant principals at the school or the principal, or call us at the phone numbers below. If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher(s), you are encouraged to contact the Research Subjects’ Advocate Line, D528 Mayo, 420 Delaware Street SE, Minneapolis, Minnesota, 55455; (612) 625-1650.

Finally, if you do not want your child to participate, please let us know by contacting us.
Sincerely,

Beverly, Dretzke, Principal Investigator  
(612) 624-3805 or dretz001@umn.edu  
Center for Applied Research and  
Educational Improvement (CAREI)  
159 Pillsbury Dr. SE  
University of Minnesota  
Mpls., MN 55455

Cheryl Bemel, Research Assistant  
(612) 624-3315 or beme0005@umn.edu  
Center for Applied Research and  
Educational Improvement (CAREI)  
159 Pillsbury Dr. SE  
University of Minnesota  
Mpls., MN 55455
Dear Parent or Guardian,

May, 2007

Your son/daughter has been invited to be in a research study of his/her small learning community experience. They study is being conducted by the Center for Applied Research and Educational Improvement, College of Education and Human Development, at the University of Minnesota in order to document the effectiveness of SLCs.

It is important that the school have the opinions of the students. Your son/daughter is one of several students that have been selected as a possible participant for an individual interview with a researcher from the University of Minnesota. The interview will last approximately ten to fifteen minutes. Participation is voluntary and risks are less than minimal.

Any information obtained during the interview will remain confidential. Students will be asked about their small learning community during this school year (2006-2007) and also during the past school year (2005-2006). Students will be asked questions about how they are doing as a student, how connected they feel to school, what their relationships are like with teachers and peers, how difficult their classes are, and similar questions about their opinions and beliefs regarding their particular SLC(s).

The interview session will be audio taped. In any report we might publish, we will not include information that will make it possible to identify any specific person. Research records, including audio tapes, will be kept in a locked file cabinet; only researchers will have access to the records. The interview will be conducted in the conference room across from the school’s main office. If students are scheduled during a class period, they will need to arrange with the teacher to make up the work missed. Teachers have agreed to cooperate so that your son/daughter’s grade will not be affected.

If you would like to ask questions, you may call the assistant principals at the school or the principal, or call us at the phone numbers below. If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher(s), you are encouraged to contact the Research Subjects’ Advocate Line, D528 Mayo, 420 Delaware Street SE, Minneapolis, Minnesota, 55455; (612) 625-1650.

Finally, if you do not want your child to participate, please let us know by contacting us.
Sincerely,

Beverly, Dretzke, Principal Investigator
(612) 624-3805 or dretz001@umn.edu
Center for Applied Research and Educational Improvement (CAREI)
159 Pillsbury Dr. SE
University of Minnesota
Mpls., MN 55455

Cheryl Bemel, Research Assistant
(612) 624-3315 or beme0005@umn.edu
Center for Applied Research and Educational Improvement (CAREI)
159 Pillsbury Dr. SE
University of Minnesota
Mpls., MN 55455
Student Interview Assent Form

We are asking if you are willing to participate in a study regarding your small learning community (SLC). We are a group of evaluators and graduate students at the University of Minnesota who have been asked to examine the effectiveness of small learning communities at your school.

If you agree to be in this study, we will ask you to come to an interview for about ten to fifteen minutes. You will be asked questions about your small learning community during this school year (2006-2007) and also during your last school year (2005-2006). You will be asked questions about how you are doing as a student, how connect you feel to school, what your relationships are like with your teachers and peers, how difficult your classes are, and similar questions about your opinions and beliefs regarding your particular SLC(s).

There will be no consequence to you if you say no to being in this study. And, if you change your mind, you can always stop participating in the interview at any time. Being in this study is totally up to you, and there will be no penalty if you don’t want to do it.

Signing here means that you have read this form and that you are willing to be in this study. If you don’t want to be in this study, don’t sign. Remember, being in this study is up to you, and it is OK if you don’t sign this or even if you change your mind later.

We guarantee that the data gathered for this evaluation will be kept confidential. Any reports produced from the data collection will not include information that would make it possible to identify any specific individual person. The interview will be audio taped, but no one will hear or have access to the tape beside the interviewer or other CAREI staff.

________________________________ ________________  ______________________________________
Signature of participant Date

_______________________________________
Signature of persons(s) explaining study

Sincerely,

Beverly, Dretzke, Principal Investigator
(612) 624-3805 or dretz001@umn.edu
Center for Applied Research and Educational Improvement (CAREI)
159 Pillsbury Dr. SE
University of Minnesota
Mpls., MN 55455

Cheryl Bemel, Research Assistant
(612) 624-3315 or beme0005@umn.edu
Center for Applied Research and Educational Improvement (CAREI)
159 Pillsbury Dr. SE
University of Minnesota
Mpls., MN 55455
Student Survey Assent Form

We are asking if you are willing to participate in a study regarding your small learning community (SLC). We are a group of evaluators and graduate students at the University of Minnesota who have been asked to examine the effectiveness of small learning communities at your school.

If you agree to be in this study, we will ask you to complete a written survey about your experience in _______ High School’s small learning communities. The questionnaire will take approximately ten to fifteen minutes to complete. Participation is voluntary and risks are less than minimal. You will be asked questions about your small learning community during this school year (2006-2007) and also during your last school year (2005-2006). You will be asked about your educational experience such as how connected you feel to school, what your relationships are like with teachers and peers, how you feel about school rules, and similar questions about opinions and beliefs regarding your particular small learning community. There will be no consequence to you if you say no to being in this study. And, if you change your mind, you can always stop taking the survey at any time. Being in this study is totally up to you, and there will be no penalty if you don’t want to do it.

Signing here means that you have read this form and that you are willing to be in this study. If you don’t want to be in this study, don’t sign. Remember, being in this study is up to you, and it is OK if you don’t sign this or even if you change your mind later.

We guarantee that the data gathered for this evaluation will be kept confidential. Any reports produced from the data collection will not include information that would make it possible to identify any specific individual person. No one will hear or have access to the surveys besides the investigators or other CAREI staff.

__________________________________ ________________
Signature of participant  Date

_______________________________________
Signature of persons(s) explaining study

Sincerely,

________________________ _____________________________
Beverly, Dretzke, Principal Investigator  Cheryl Bemel, Research Assistant
(612) 624-3805 or dretz001@umn.edu  (612) 624-3315 or beme0005@umn.edu
Center for Applied Research and  Center for Applied Research and
Educational Improvement (CAREI)  Educational Improvement (CAREI)
159 Pillsbury Dr. SE  159 Pillsbury Dr. SE
University of Minnesota  University of Minnesota
Mpls., MN 55455  Mpls., MN 55455
APPENDIX F

Training Sessions

Instructions For Coding Student Responses to SSI

Session 1: The following samples are guidelines to be used when coding student responses. Today we will listen to an audiotape of a simulated student interview together. While we listen to the tape, we will simultaneously view the completed written protocol of the corresponding interview. We will then each code responses one at a time. The audiotape may be paused whenever desired by the coders. Once the audiotape has ended, we will review coding results and conduct discussions about differences in coding. We will then calculate inter-rater reliability.

The coding guidelines sheet depicts possible topics that may surface during a student interview. If, during our practice sessions, other possible topics are uncovered, we may add the new topics during practice sessions.

Session 2: Today we will listen to two simulated student interviews. We will proceed as we did during session 1. First, we will each code independently; then, we will review our results and discuss differences. Again, we will calculate inter-rater reliability.

Session 3: If necessary, (due to low inter-rater reliability) a third session will be held.
## Coding Guidelines for Student SLC Interview (SSI)

### A) Motivation

<table>
<thead>
<tr>
<th>Theme</th>
<th>Possible student topic</th>
<th>Possible student topic</th>
<th>Possible student topic</th>
<th>Possible student topic</th>
<th>Miscellaneous responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Examples:</td>
<td>I work hard to make my grades.</td>
<td>The teachers care about me and that makes me want to work hard.</td>
<td>If I get bad grades my parents will be angry.</td>
<td>The group I’m in is full of high achievers, so I want to work hard.</td>
<td>I’ve always been a motivated person; it’s just part of my makeup.</td>
</tr>
<tr>
<td>I gave up a sport so I could do better in school.</td>
<td>My teacher supported me when no one else would.</td>
<td>I like working hard because it makes my parents proud.</td>
<td>My friends and I study after school to make good grades.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
B) Perceived connection and belongingness

<table>
<thead>
<tr>
<th>Theme</th>
<th>Possible student topic</th>
<th>Possible student topic</th>
<th>Possible student topic</th>
<th>Possible student topic</th>
<th>Miscellaneous responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived connection</td>
<td>I have a lot of friends.</td>
<td>The community is very welcoming.</td>
<td>Teachers make me feel welcome.</td>
<td>I feel like I belong.</td>
<td>Note here responses that do not fit elsewhere.</td>
</tr>
<tr>
<td></td>
<td>Examples: I feel better about friends this year.</td>
<td>Examples: Everyone works to see that I’m included.</td>
<td>Examples: Teachers work hard to get to know students.</td>
<td>Examples: We are a tight-knit community.</td>
<td>Example: I always fit in wherever I go.</td>
</tr>
</tbody>
</table>
### C) Perceived Control

<table>
<thead>
<tr>
<th>Theme</th>
<th>Possible student topic</th>
<th>Possible student topic</th>
<th>Possible student topic</th>
<th>Possible student topic</th>
<th>Miscellaneous responses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sense of Control</strong></td>
<td>I can control my grades based on how hard I work.</td>
<td>Teachers have all the control.</td>
<td>Last year I had more control than this year.</td>
<td>Classes are too hard.</td>
<td>Note here responses that do not fit elsewhere</td>
</tr>
</tbody>
</table>

**Examples:**
- If you work hard, you make good grades.
- The teacher has the real say in the grades we get.
- Teachers have all the power.
- Last year was much easier than this year so I goofed off and got good grades then; now it’s harder and I must work more.
- This school is too hard for me and I don’t know how to make better grades.
- Control is existential.
D) Perceived Competence

<table>
<thead>
<tr>
<th>Theme</th>
<th>Possible student topic</th>
<th>Possible student topic</th>
<th>Possible student topic</th>
<th>Miscellaneous responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived Competence</td>
<td>I am a very competent student.</td>
<td>I am better at school this year.</td>
<td>I was better at school last year.</td>
<td>Note here responses that do not fit elsewhere</td>
</tr>
<tr>
<td></td>
<td>Examples:</td>
<td>Examples:</td>
<td>Examples:</td>
<td>Example:</td>
</tr>
<tr>
<td></td>
<td>I have adjusted to school and I am doing well with my grades.</td>
<td>This year is more to my liking; the classes are more challenging so I work harder.</td>
<td>I am in a new SLC and it is much harder than last year; I am not making good grades.</td>
<td>Competence is in the eye of the beholder.</td>
</tr>
<tr>
<td></td>
<td>I have always been a good student and will continue to be one throughout high school.</td>
<td>The teachers really raised the bar this year and I’m struggling.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX G

SSS Staff Comments Regarding Their Assigned SLC
## SSS Staff Comments regarding their assigned SLC

<table>
<thead>
<tr>
<th>SLC A and B comments</th>
<th>SLC C comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Positive comments</strong></td>
<td></td>
</tr>
<tr>
<td>Students and adults appear to care about one another.</td>
<td>A few [students] were proud and some thrived.</td>
</tr>
<tr>
<td>Kids feel welcome.</td>
<td>There was a sense of caring and community.</td>
</tr>
<tr>
<td>A strong sense of community exists.</td>
<td>I liked it that it was the neighborhood program.</td>
</tr>
<tr>
<td>The philosophy of our program is cutting edge.</td>
<td></td>
</tr>
<tr>
<td>Teacher-student and student-student relationships are for most kids adequate to more than adequate.</td>
<td></td>
</tr>
<tr>
<td>Kids learn while growing in our SLC community.</td>
<td></td>
</tr>
<tr>
<td>Kids can regularly practice inquiry and critical inquiry skills.</td>
<td></td>
</tr>
<tr>
<td>Students have a lot of choices and can have unique opportunities.</td>
<td></td>
</tr>
<tr>
<td>Our students are motivated to learn.</td>
<td></td>
</tr>
<tr>
<td>Instruction is always fresh; it isn’t canned.</td>
<td></td>
</tr>
<tr>
<td><strong>SLC A and B comments</strong></td>
<td><strong>SLC C comments</strong></td>
</tr>
<tr>
<td>-------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Our curriculum pushes students.</td>
<td>A few [students] were proud and some thrived.</td>
</tr>
<tr>
<td>Students seem to feel very much supported.</td>
<td>[Students] felt like throw-aways.</td>
</tr>
<tr>
<td>The students are highly motivated.</td>
<td>The kids felt less than.</td>
</tr>
<tr>
<td>Our students excel in this SLC.</td>
<td>[Students felt] beneath others.</td>
</tr>
<tr>
<td>Our curriculum is matchless.</td>
<td>Students thought [the SLC] was a joke.</td>
</tr>
<tr>
<td><strong>Negative Comments</strong></td>
<td></td>
</tr>
<tr>
<td>Students and adults appear to care about one another.</td>
<td>[Students felt] second class.</td>
</tr>
<tr>
<td>Some students come unprepared.</td>
<td>Some [students] felt bad about [the SLC] and were ashamed.</td>
</tr>
<tr>
<td>The SLC is simply too large.</td>
<td></td>
</tr>
<tr>
<td>Class sizes have gotten out of hand.</td>
<td></td>
</tr>
<tr>
<td>Student to student relationships have been inadequate but have been improving.</td>
<td></td>
</tr>
<tr>
<td>SLC A and B comments</td>
<td>SLC C comments</td>
</tr>
<tr>
<td>---------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>The kids were treated as outsiders and were labeled.</td>
<td></td>
</tr>
<tr>
<td>The kids in [SLC C] were less able than those in the rest of the school.</td>
<td></td>
</tr>
<tr>
<td>Everybody looked down on our kids and assumed [their] skills were lower so people didn’t have high expectations.</td>
<td></td>
</tr>
<tr>
<td>Kids felt segregated from the rest of the building, did not feel they were allowed to be integrated into the high school, and felt left out.</td>
<td></td>
</tr>
<tr>
<td>[Kids] were ashamed.</td>
<td></td>
</tr>
<tr>
<td>[Kids were] have-nots.</td>
<td></td>
</tr>
<tr>
<td>[Kids were] not quite as special.</td>
<td></td>
</tr>
<tr>
<td>[Kids were] embarrassed.</td>
<td></td>
</tr>
<tr>
<td>[Kids were] second rate.</td>
<td></td>
</tr>
<tr>
<td>Teachers got to have small classes because nobody wanted to teach in [SLC C].</td>
<td></td>
</tr>
<tr>
<td>Outside staff were unwilling to help our kids build background knowledge or scaffold.</td>
<td></td>
</tr>
<tr>
<td>SLC A and B comments</td>
<td>SLC C comments</td>
</tr>
<tr>
<td>---------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>[The] lack of diversity was offensive.</td>
<td></td>
</tr>
<tr>
<td>Most of our kids were minorities and received free lunches.</td>
<td></td>
</tr>
<tr>
<td>No one’s encouraging [our students].</td>
<td></td>
</tr>
<tr>
<td>[SLC C] was referred to as the low ability, high behavior problems program.</td>
<td></td>
</tr>
<tr>
<td>There was a sense of community, but it was not a healthy sense of community.</td>
<td></td>
</tr>
<tr>
<td>I didn’t like [the SLC].</td>
<td></td>
</tr>
<tr>
<td>It was so segregated that it was unethical.</td>
<td></td>
</tr>
<tr>
<td>I don’t think [SLC C] helped students.</td>
<td></td>
</tr>
<tr>
<td>Our kids didn’t try because they knew teachers didn’t expect much of them.</td>
<td></td>
</tr>
<tr>
<td>Our kids felt less supported than the popular kids, they said.</td>
<td></td>
</tr>
<tr>
<td>Kids in our SLC were educationally mistreated, and as a result were difficult to reach in spite of incredible efforts made by the staff.</td>
<td></td>
</tr>
<tr>
<td>SLC A and B comments</td>
<td>SLC C comments</td>
</tr>
<tr>
<td>----------------------</td>
<td>----------------</td>
</tr>
<tr>
<td></td>
<td>It was assumed that if you were a student of color, you belonged to [SLC C].</td>
</tr>
<tr>
<td></td>
<td>African American kids in [SLC C] felt, who are all these white people and why am I not with them?</td>
</tr>
</tbody>
</table>

*Actual quotations from staff.*