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# A Case Study of Implementing Collaborative Student Support Teams to Support Students on the Path to High School Graduation

Janice L. Muench

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A Case Study of Implementing Collaborative Student Support Teams  
to Support Students on the Path to High School Graduation

by

Janice L. Muench

A dissertation submitted in partial fulfillment  
of the requirements for the degree of

Doctor of Education

in

Learning and Leading

University of Portland

School of Education

2023

# A Case Study of Implementing Collaborative Student Support Teams to Support Students on the Path to High School Graduation

by

Janice L. Muench

This dissertation is completed as a partial requirement for the Doctor of Education (EdD) degree at the University of Portland in Portland, Oregon.

Approved:

**Redacted** \_\_\_\_\_ 3/27/23  
 Chairperson Date

**Redacted** \_\_\_\_\_ 3.27.23  
 Committee Member Date

**Redacted** \_\_\_\_\_ 03.27.23  
 Committee Member Date

If applicable:

DocuSigned by:  
**Redacted** \_\_\_\_\_ 3/14/2023  
 Additional Committee Member Date

**Redacted** \_\_\_\_\_ 3/27/23  
 Additional Committee Member Date

Approved:

**Redacted** \_\_\_\_\_ 3.27.23  
 Graduate Program Director Date

**Redacted** \_\_\_\_\_ 3/27/23  
 Dean of the Unit Date

**Redacted** \_\_\_\_\_ 3/27/23  
 Dean of the Graduate School or Representative Date

### **Dedication**

I dedicate this dissertation to Brett and Marissa, my wonderful kids. Thanks for being such amazing humans! You make me so proud every day to be your mom. Your resilience, resolve, and strong character will serve you well in life. I love you!

Brad, you are an amazing partner in life. You supported me through some very busy times, provided a sounding board for many of my ideas, and listened to me talk incessantly about leadership, students, and systems. I am so grateful to have had your support throughout this process. I love you!

Mom, as a young widow, you raised a family of six children on your own. You are the epitome of resilience. The caring, kind, and thoughtful approach you showed in raising all of us provided the model for how I wanted to lead, teach, and support students who may also have had broken systems in their lives. I am so grateful for the many lessons that you have shared and continue to share with me at 90 years old.

Mark Freado, Steve VanBockern, Larry Brendtro, and Martin Brokenleg, your work with Reclaiming Youth at Risk International (RYAR) shaped the way that I supported students who struggled in school. I am so grateful for all the tools that I gained by attending your training. I was hooked from the very first session with the Circle of Courage Conference and knew that you had offered me the biggest gift on my educational journey. You have no idea how many students have benefited from the influence you had on shaping my approach to teaching, leading, and supporting students. Thank you, and I vow to continue your amazing work as a RYAR trainer!

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I owe such a debt of gratitude to my committee chairperson, Dr. Julie Kalnin, who maintained such a calm and steady resolve throughout the process. Thank you for your support with my dissertation and your vast knowledge in ensuring that my study was completed ethically, with integrity, with a manageable scope, and on time. Additional thanks are due to my committee members, Dr. Gary Beckley and Dr. Bruce Weitzel, whose thoughtful questions and suggestions provided vital contributions to my process and the final product. I also am extremely grateful for my doctoral cohort. We entered this program during a pandemic and worked in an online format for a healthy portion of our studies. Yet the relationships flourished long before we met in person. My cohort members' friendship, humor, incredible knowledge, and selfless support will forever be a part of this memorable time.

### **Abstract**

This research explores who is at risk of dropping out of high school and how collaborative Student Support Teams can contribute to students staying on track to graduate high school. The issue of student success is important because graduation is positively correlated with important life outcomes and ability to earn an adequate income in the labor market. For this paper, “at-risk students” is defined as students considered in danger of not graduating, not being promoted, or not meeting other education-related goals. The research looks at high school dropout indicators and how the Collaborative Response Model contributes to student success in school. The results will inform the ways in which society, particularly education system support teams, can positively support youth who are at risk of early school leaving.

*Keywords:* collaborative response, dropout, graduation, at-risk, engagement, student supports, resilience, connection.

## Table of Contents

Dedication .....	3
Acknowledgments .....	4
Abstract .....	5
List of Figures .....	8
List of Tables .....	8
Chapter 1: Introduction .....	10
School Responses to Dropouts .....	11
Characteristics of At-Risk Youth.....	13
Statement of the Problem.....	14
Conceptual Underpinnings .....	16
Purpose of the Research.....	17
Research Questions .....	18
Scope of the Study .....	18
Limitations .....	19
Delimitations.....	20
Key Terms.....	20
Summary.....	22
Chapter 2: Review of the Literature.....	23
Conceptual Framework.....	23
Theoretical Framework.....	28
Risk Factors Impacting High School Completion .....	32
Supports That Assist Youth to Graduate .....	40
Models of Collaborative Support.....	54
Collaborative Response .....	67
Summary .....	71
Chapter 3: Methodology .....	73
Rationale for Methodology .....	73
Context: The Collaborative Response .....	75
Setting .....	77
Participants.....	78

Role of the Researcher .....	80
Data Collection Procedures .....	82
Data Analysis .....	86
Trustworthiness .....	89
Ethical Considerations .....	93
Summary .....	94
Chapter 4: Findings .....	96
Participant Characteristics .....	97
Available Student Supports (RQ1) .....	101
Effectiveness of CR Processes and Structures (RQ2) .....	114
SST Outcomes (RQ3) .....	139
Summary .....	162
Chapter 5: Discussion .....	164
Discussion .....	168
Implications for Collaborative Response Implementation .....	182
Future Research .....	187
Limitations .....	188
Conclusion .....	189
Recommendations .....	192
References .....	195
Appendix A: Jigsaw Learning Survey .....	218
Appendix B: Collaborative Response Questionnaire .....	220
Appendix C: Consent Form for Interviews .....	232
Appendix D: One-to-One Interview Questions .....	235
Appendix E: Categories and Codes .....	238
Appendix F: Continuum of Supports—School Districts 1 and 2 .....	239
Appendix G: Themes and Codes .....	242



### List of Figures

Figure 1 <i>Conceptual Framework of Support</i> .....	24
Figure 2 <i>Four-Tier Support Overview</i> .....	26
Figure 3 <i>Bronfenbrenner's (1979) Ecological Systems Model</i> .....	29
Figure 4 <i>Multi-Tiered System of Supports</i> .....	59
Figure 5 <i>Universal Design for Learning Guidelines</i> .....	67
Figure 6 <i>CTM Structure</i> .....	71
Figure 7 <i>Availability of Tiered Supports: Teachers vs. Administrators (%)</i> .....	103
Figure 8 <i>Survey Participants' Access to Tiered Supports</i> .....	106
Figure 9 <i>Barriers That Exist in Supporting Students Across the Tiers of Support</i> .....	119
Figure 10 <i>Effectiveness of CTM, SST, and Communication Between Teams</i> .....	147

### List of Tables

Table 1 <i>Collaborative Team Meeting Role Overview</i> .....	76
Table 2 <i>Survey Participants and School Demographics</i> .....	79
Table 3 <i>Research Strategy</i> .....	91
Table 4 <i>Survey Participants' Role and Years of Experience With CR</i> .....	97
Table 5 <i>Grade Level Served by Survey Participants</i> .....	98
Table 6 <i>Survey Participants' Years of Experience With CR</i> .....	99
Table 7 <i>Interview Participant Demographics</i> .....	101
Table 8 <i>Themes and Categories for Research Question 1</i> .....	102
Table 9 <i>Survey Results of Tiered Supports Available for Students to Access</i> .....	105
Table 10 <i>Survey Participants' Degree of Access to Tiered Supports for Students</i> .....	107

Table 11 <i>Degree of Survey Participant Satisfaction With Access to Tier 4 Supports ....</i>	109
Table 12 <i>Themes and Categories for Research Question 2.....</i>	116
Table 13 <i>Resources Participants Rated as Providing the Most Support.....</i>	117
Table 14 <i>Survey Participants' Ranking of Key Guidelines Within CR.....</i>	118
Table 15 <i>Resources That Survey Participants Indicated Provided the Most Support....</i>	132
Table 16 <i>Participant Satisfaction With CR Implementation, Procedures, and Structures .....</i>	133
Table 17 <i>Survey Participants' Perceptions of Effectiveness of CTMs and SSTs.....</i>	134
Table 18 <i>Themes and Categories for Research Question 3.....</i>	139
Table 19 <i>Interviewee Principal Leadership Years Involved With School and CR Training.....</i>	150
Table 20 <i>Graduation Rates for Each School .....</i>	151
Table 21 <i>Survey Participants' Perceptions of CR Influence on Outcomes .....</i>	154

## Chapter 1: Introduction

Almost two million public secondary students (5.1% of all public secondary students) in the United States drop out of school each year (Irwin et al., 2021). Comparatively, Statistics Canada reports that Canadian dropout rates are 8.5%, or 340,000 students, per year (Uppal, 2017).

While the dropout rate in schools, especially in developing countries, has always been problematic, the situation has become worse with COVID-19 (Shuja et al., 2021). The pandemic has increased dropout rates for students as families have experienced financial pressures (Shuja et al., 2021). In both Canada and in the United States, most nongraduates are minority learners, come from low socioeconomic status backgrounds, or both (Irwin et al., 2021; Uppal, 2017). The United States and Canada have the lowest dropout rates when compared to other parts of the world; however, the issue of noncompletion remains a priority for school improvement.

Although dropout statistics may seem relatively low in North America, when one considers the negative lifelong impact of not graduating from high school, the cost is extremely high. Uppal (2017) reported that for Canadians, the median employment income of female high school graduates surpassed that of female noncompleters by 43% (\$30,200 versus \$21,100), and with males the difference was 19% (\$43,200 versus \$36,300). Having a high school diploma is positively correlated with gainful employment, which helps to improve health, medical access, mental health, and healthy life outcomes. For this reason, it is important to consider the long-term impacts of noncompletion. Nongraduates are likely to be unemployed (Legters & Balfanz, 2010; Taylor et al., 2017; Uppal, 2017) and to earn less when employed (Khatiwada et al.,

2007; Uppal, 2017; Taylor et al., 2017). The loss in lifetime earnings from dropping out of high school rather than graduating is over \$367,000 per individual (Taylor et al., 2017). Further research shows that nongraduates suffer from poor health (Kingston & Mihalic, 2016; Stringhini et al., 2017).

Improving high school graduation rates is a laudable goal that will support lifelong personal outcomes for graduates, as well as benefit the economy. By converting dropouts into graduates for just one graduating class of students, the United States could see increases in their economies ranging from hundreds of millions of dollars to \$42 billion over a lifetime for each graduating class (Legters & Balfanz, 2010). Although the economic gains that result from high graduation rates may get more attention from stakeholders, the positive life outcomes for individuals who complete high school are immeasurable.

### **School Responses to Dropouts**

When needs in society intensify, so do needs in schools (Darling-Hammond et al., 2017; Fullan et al., 2017). The severity of the issue of noncompletion requires a renewed interest in schooling and the role instructional leaders play in schools (Deal & Peterson, 2016; Fullan et al., 2017; Quinn et al., 2019). Although there has been long-standing interest in much-needed reform, the current educational climate has resulted in the recognition that the highest-needs students have been dropping out at an increased rate (Schleicher, 2020). Further, since the COVID-19 crisis, governmental pressure for schools to improve equity and access to quality education for marginalized learners has risen around the world. This means there is a need to reform schools to adopt solutions

within a safe and caring space for the growing needs that are manifesting in classrooms (Fullan et al., 2017; Quinn et al., 2019; Schleicher, 2020).

Principals must manage this complex world at the same time as students and staff are experiencing alternative ways of teaching and learning. With increasing numbers of alternative platforms for learning come other complexities that are changing how to think about leadership and learning (Fullan et al., 2017; Hallinger, 2011; Northouse, 2019). Since the pandemic, educators are experiencing the call to lead and learn in new ways and are increasingly stretched with the responsibilities of their roles. School leaders require a complex skill set based on experience and intuition. This skill set includes deeper levels of social-emotional competencies that extend to equity concerns that became more evident during the pandemic (Northouse, 2019).

Despite innovation in education throughout the past hundred years, schools today contain antiquated ideas and inefficiencies that are representative of outdated systems (Fullan, 2018b; Hargreaves & O'Connor, 2018). To date, education policy and reform initiatives have provided only surface-level responses. Complicated problems continue to infiltrate and stifle the system with increasing numbers of disillusioned students (Carrington, 2019; Deal & Peterson, 2016; Sahlberg, 2017). Thus, the focus of this paper is to explore the issue of high school noncompletion beginning with an exploration of who is dropping out of high school (those affected by low socioeconomic status, minority learner status, family dynamics, ability level, and academic failure), the causes of students dropping out of high school (connection, belonging, and attendance), and what is known about the interventions (leadership, high-quality teaching, and collaborative

supports) that are likely to lead to high school completion for the students deemed at risk of early school dropout.

### **Characteristics of At-Risk Youth**

Many factors contribute to students being identified as at risk. A dictionary definition deems “at risk” as “a state or condition marked by a high level of risk or susceptibility” (Merriam-Webster, n.d.). This definition supports research that defines at-risk youth as susceptible to risk due to poor health, negative lifestyle choices, and an inability to transition into society to become productive citizens (Uppal, 2017). Lee and Burkam (2003) placed risk factors into three categories: (a) social background (e.g., race/ethnicity, gender, socioeconomic status, family structure); (b) academic background (e.g., ability test scores, grade-repeating history); and (c) academically related behaviors (e.g., engagement with school, school grades, course completions, failures, truancy, school disciplinary encounters).

Uppal (2017) defined six risk factors for students leaving school early: (a) low levels of education attained by their parents, (b) peer-related issues, (c) family dynamics, (d) teen pregnancy, (e) low family income, and (f) single parenthood. Low self-esteem and low aspirations linked to trauma, depression, and mental health issues also contribute to dropping out (Rumberger, 2011; Swanson, 2009).

For the purpose of this paper, “at-risk” refers to students considered in danger of not graduating, being promoted, or meeting other education-related goals (Brendtro et al., 2019). Though the preceding definitions help frame thoughts around the youth populations that are deemed at risk, it is important to acknowledge that the term remains problematic.

As an educator and lifelong advocate for youth, I validate that when we shift our thinking to support positive language versus deficit language about ability or advantage, students can thrive in school (Hammond, 2014; Shields, 2018). Systems have mechanisms and staff to support understanding how individuals are positioned within their institutions (privileged or marginalized) to support their potential to succeed. Moreover, Shields (2018) asserted that leaders need to understand that it is the system that has placed many students in the category of being a minority. This affirms the beliefs of Shields (2018) and Hammond (2014) that when systems place the responsibility on the student rather than the system, students are at a disadvantage. Moreover, Shields stated that instead of calling groups a minority, successful systems realize that calling them *minoritized* shifts the responsibility for the issues they face away from a sole focus on their personal choices (as suggested in many of the definitions) and onto the system.

### **Statement of the Problem**

Improving high school graduation rates is a necessary goal for educators, with positive outcomes for the economy and a higher quality of life for young people (Legters & Balfanz, 2010; Rumberger et al., 2017; Taylor et al., 2017; Uppal, 2017). If schools and society better understand who is dropping out and implement support to prevent this phenomenon, then more students will stay in school. It is well documented that the problem of high school dropout has high costs to society and to individual noncompleters, yet there is not enough leadership training, collaborative processes, and tiered supports that have the highest impact on improving this important life outcome. The greatest challenge for educators is to address leadership principles, collaborative

practices, and high-quality teaching that will better support youth who struggle in school (Fullan et al., 2017; Quinn et al., 2019).

Many pragmatic approaches have been employed to reform education in ways that will support student success, including transformative leadership, high-quality teaching, collaborative responses to intervention, and Student Support Teams (SSTs). These approaches are discussed in detail below. As with any approach or philosophy in education, an overreliance on one strategy for solving the issues of underperforming students can be restrictive and limiting. The complex issue of supporting youth who are at risk of failure will be best tackled by a team of committed people rather than approached from an individual standpoint (Fullan et al., 2017; Hewson & Hewson, 2022; Rumberger et al., 2017). Regardless of where the professional or the parent stands on this emotional and complex issue, a common theme emerges. For any intervention program to be successful, it needs to be well resourced and delivered by trained professionals who appreciate and accept the unique abilities and needs of students. The goal of reclaiming at-risk youth is thorny work that relies on responding to early warning factors with targeted, effective, collaborative, supportive, and caring approaches to intervention (Bowers & Zhou, 2019; Darling-Hammond et al., 2017; Hewson & Hewson, 2022). The issue of supporting struggling learners is complex; however, education systems are in an advantageous position (often spending more time with kids than the parents) to take on the challenge of supporting diverse populations to succeed in school.

School budgets are decreasing with no additional supports being provided for the growing numbers of students attending school. This causes systems and leaders to look for supportive ways to assist learners to reach their educational goals with inclusive,



whole system models of intervention. Research suggests that systems need to work collaboratively and distribute leadership among those involved in the organization to thwart the many obstacles inherent in complex systems (Fullan et al., 2020; Hargreaves & O'Connor, 2018; Hewson & Hewson, 2022).

Although many tiered-level approaches to support students have been developed (Hewson & Hewson, 2022), little research can be found to understand how collaborative SSTs help students stay on track to complete high school. There is a gap in the research in the area of the tiered intervention of Collaborative Response (CR), and no empirical studies have been conducted. The results of this study will contribute to the current research and conversation about supports that work for at-risk youth to achieve high school graduation. Further, this study will provide an example of how CR and SSTs can increase access, equity, opportunity, and achievement for diverse learners.

Research on effect size implores leaders to focus on what matters most in improving schools (Donohoo et al., 2018). Research on concentrating CR and SSTs on the areas that matter the most will contribute to the data on how to improve student learning at the high school level. This study will increase knowledge on the supports, specifically in high school, that are having an impact on student success. Insights from this study could inform other school leaders and division leaders about the collaborative intervention model of CR, and how the processes involved can inform interventions for students who are struggling in high school.

### **Conceptual Underpinnings**

A theoretical framework is the lens used to consider, sort, and analyze the data. The framework used in this study to inform and research the tiered levels of support

needed for students who have deficits in one or more domain of their development is the Ecological Systems Model (Bronfenbrenner, 1979). My research is framed by the risk factors perceived to disrupt a student's ability to succeed in school. The domains in the Ecological Systems Model consider family, school, peers, and community, and offer insights into tiered-level interventions that can support these domains.

The conceptual framework for this case study is the CR approach (Hewson & Hewson, 2022). Several school divisions currently use the CR approach to assist students and staff by providing a continuum of supports along four tiers of intervention: Tier 1, universal classroom instruction; Tiers 2 and 3, targeted with differentiated strategies, accommodations, and interventions; and Tier 4, the specialized tier that offers intensive supports that are individualized and may involve outside resources, agencies, and further testing like psychoeducational testing or speech and language assessments.

### **Purpose of the Research**

The purpose of this instrumental case study is to document the degree to which SST members perceive that the processes and structures of the CR approach support students to graduate from high school. The CR approach and SSTs shift the responsibility of student success back onto the system. The system requires more inclusive reconstruction around marginalized students. There are other tiered-level interventions that have informed the CR, and the research findings on those intervention structures have provided insight into the development of CR at the secondary level (Hewson & Hewson, 2022).

Grounded in Bronfenbrenner's (1979) Ecological Systems Model, which depicts how social, environmental, and biological factors all work together, this study aims to

learn from the perceptions of collaborative SSTs as they explore the systems that influence students on their path to high school graduation. This theoretical model explains how trouble in one domain results in difficulties in another. Moreover, it posits that interrelated practices are increasingly complex and that the interactions between students and teachers are correlated (Mc Guckin & Minton, 2014). This qualitative instrumental case study focuses on the CR and SSTs (teachers, counselors, administrators, psychologists, and consultants) in three rural high schools in Northern Alberta, Canada, as they convey the tiered-level supports that guide students to graduate from high school.

### **Research Questions**

This study addresses three main research questions.

**RQ1:** What are the collaborative student supports available to students in rural communities to assist them in staying on track to obtain their high school diplomas?

**RQ2:** How do SSTs describe their implementation of CR as they engage in supporting at-risk students?

**RQ3:** What are the perceived outcomes that SST members observe from their work in keeping students on track to achieve their high school diploma?

### **Scope of the Study**

CR has been introduced in two rural school districts in Alberta to build the capacity of staff to consistently support students in universal, targeted, and specialized ways. This research involves SSTs at three high schools and their perceived impact of the tiered interventions on assisting students to graduate from high school. The research also

focused on staff levels of understanding of the CR processes, structures, and procedures. This instrumental case study (Stake, 2010) was bounded by the experiences of division leaders, counselors, directors, teachers, psychologists, and coordinators involved in SST interventions at the three participating schools during the 2022–2023 school year. The intention of implementing the CR model in the two school districts was to develop a system to support all schools in these divisions and provide a continuum of support that would lead to consistent interventions for all students. There have been varying degrees of implementation success.

The SST includes individuals involved with the CR who are engaged when students require targeted and specialized support. The SST meets weekly or biweekly to discuss students referred by staff in the collaborative team meetings (CTMs), which involve all staff and are organized by team, grade level, subject area, or a mix of the three. CTM members provide a list of key issues, themes, or students that can no longer be supported using universal strategies. At the division level, SST members are offered professional learning to gain the knowledge and skills to intervene, train, and support staff in implementing the tiered-level interventions students need to succeed in school.

### **Limitations**

The results of case study research are not easy to generalize to other settings or circumstances (Stake, 2010). It is hoped that this case study research will provide high school practitioners with valuable information about tiered-level responses that support students on the path to graduation. This case study may offer direction to system leaders developing continuum-of-support models in their settings, and potentially guide other systems in shaping continuum-of-support models for high schools.

Another limitation of this study was that the members of the SST who were interviewed may have had different experiences due to the levels of training, staff turnover, leadership in the school, contextual factors that impact the supports available to them, and number of years that CR has been implemented in their schools.

### **Delimitations**

I further delimited the study to 11 staff members and collected the data over a 6-week period. The high school settings were delimiting in that staff perceptions were restricted to students younger than 15 years of age. My thinking was that the interviews would still reflect and expose the past experiences of struggling learners in their younger years through the information that was provided by the SST participants.

### **Key Terms**

**Collaborative Response:** CR is a system of beliefs, structures, and processes to transform how schools respond to the needs of students. It involves SST meetings, a pyramid of interventions, and assessments of interventions. The core beliefs are that all students can learn, teachers make the greatest impact on student learning, schools cannot achieve high levels of success with adults working in isolation, and leadership is responsible for ensuring structures for collaboration. In the CR model, three components are essential: structures and process, data and evidence, and continuum of supports. All three components must work together to support students (Hewson & Hewson, 2022).

**Collaborative Team Meetings:** CTMs focus on all students designated for the team (the staff are organized in meetings by grade level, multigrade level, or by subject area), with support focused primarily on the classroom level (Tier 1, universal support) through an examination of key issues. Meetings are every 3 to 5 weeks. The members

include teachers, leaders, counselors, educational assistants, a special education director, a reading specialist, and coaching consultants.

**Student Support Teams:** SSTs include the individuals who are part of the CR model approach in supporting student learning. This includes teachers, leaders, counselors, educational assistants, and coaching consultants. This school team structure provides ongoing support to classroom teachers relating to individual students and small groups (Hewson & Hewson, 2022). Often, students are referred to the SST by the CTM members when they cannot solve the key issue with universal classroom support. The SST meets two to three times in a month to review successes, challenges, themes, and intervention strategies that will help students who are struggling to thrive in school.

**In-Reach Programming:** In-reach programming allows students who have chronic attendance issues to access module learning, with video lessons and individual staff support, when they have fallen too far behind to keep up with the pace of traditional classroom instruction. This is like outreach school learning, only it is housed within the regular school model to maintain the connections that the student has within the school.

**Outreach Programming:** An outreach program provides an educational alternative for junior and senior high school students who find that traditional school settings do not meet their needs. Instruction is provided through a variety of methods, including small group instruction and one-on-one instruction. Full-time attendance is not mandatory for outreach learners.

**Resilience:** In the context of exposure to significant adversity, resilience is the capacity of individuals to navigate their way to the psychological, social, cultural, and physical resources that sustain their well-being, and their capacity individually and

collectively to negotiate for these resources to be provided in culturally meaningful ways (Ungar, 2008).

### **Summary**

When students show that they are not finding success meeting the academic outcomes at the high school level, targeted action needs to be taken to help them find success in school. At the school level, the system-wide approaches that support students need to be implemented at the first sign of struggle. Research affirms that the systemic barriers of high school settings require that collaborative, formalized, and purposeful conversations occur to inform action (Hewson & Hewson, 2020). Through an instrumental case study, this study provides details on how three schools in two Northern Alberta school divisions implemented the CR approach to intervention, which involved formalized, collaborative processes to support students to achieve high school graduation.

Chapter 2 provides an extensive literature review grounded in Bronfenbrenner's (1979) Ecological System Model along with the conceptual framework of the CR model (Hewson & Hewson, 2022). Further, this review identifies risk factors impeding a student's ability to achieve high school graduation, followed by school supports that have a high impact on improving the likelihood that students will graduate from high school.

Chapter 3 describes the methodology selected to complete this research, specifically, an instrumental case study grounded in the framework of Bronfenbrenner's (1979) Ecological Systems Model, as the study is guided by the CR model as a conceptual framework (Hewson & Hewson, 2022). Finally, Chapter 4 describes the findings and Chapter 5 highlights recommendations and implications of this research.

## **Chapter 2: Review of the Literature**

The purpose of this instrumental case study is to document the degree to which SST members perceive that the processes and structures of the CR supported students to graduate from high school.

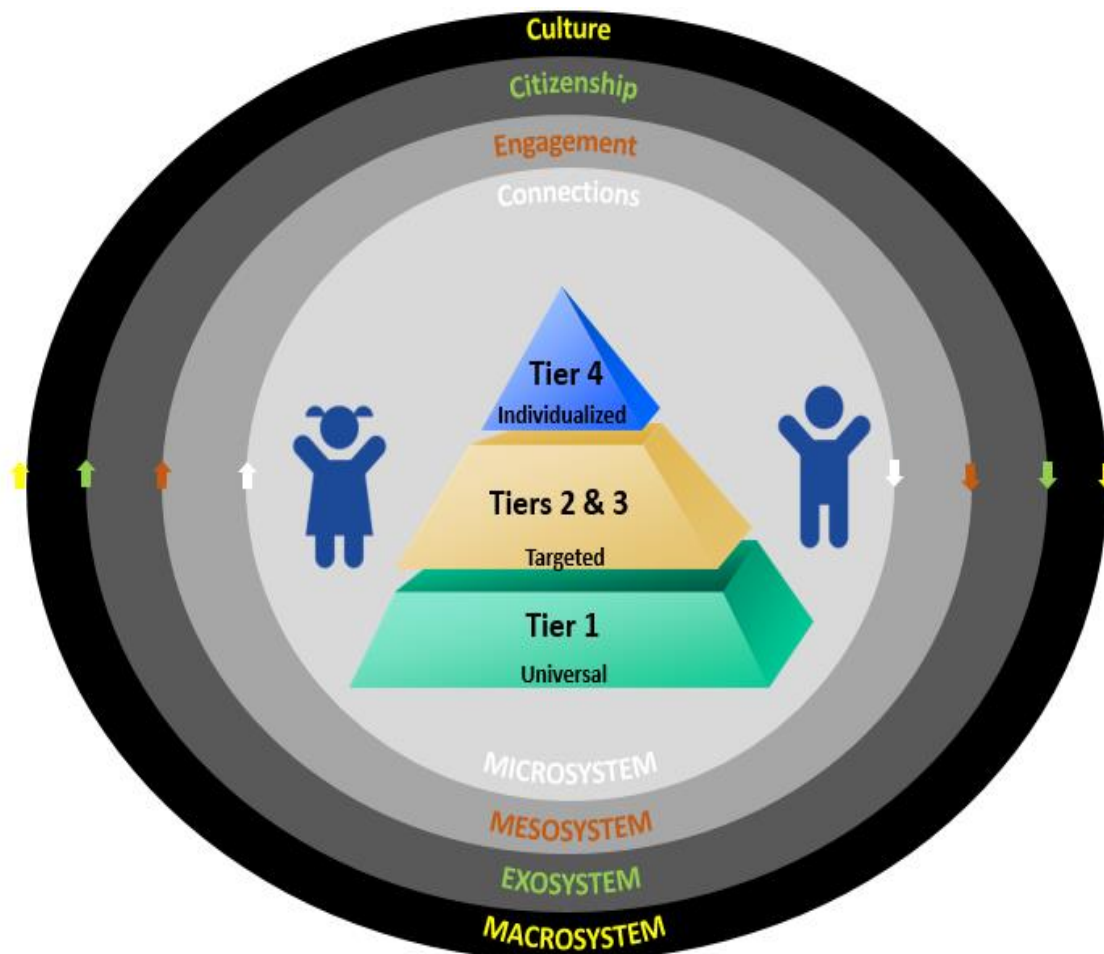
The literature review is grounded in Bronfenbrenner's (1979) framework, which depicts how social, environmental, and biological factors all work together in human development. This framework shapes the research outlining the factors that are interfering with student success and how tiered interventions can respond to the deficits. The literature review outlines the factors that impact high school completion. A review of the literature will be presented to describe at-risk risk factors of for high school noncompletion, followed by research on leadership, high-quality teaching, and supports that work in inclusive practices that promote high school completion.

### **Conceptual Framework**

The conceptual framework for this case study is the CR (Hewson & Hewson, 2022), and the study is framed by Bronfenbrenner's (1979) Ecological Systems Model, which explores the circles of influence (family, community, peers, school, culture) in a child's development. The ecology of a child can foster growth or fuel problems, and interventions in a school's continuum of supports need to reflect this reality (Brendtro et al., 2019).

In Figure 1, the conceptual framework reflects the intersection between a school division's continuum of support using CR (Hewson & Hewson, 2022) and Bronfenbrenner's (1979) Ecological Systems Model.



**Figure 1***Conceptual Framework of Support*

*Note.* Based on concepts from *Collaborative Response: Three Foundational Components That Transform How We Respond to the Needs of Learners* (p. 181), by K. Hewson and L. Hewson, 2022, Corwin Press. Copyright 2022 by Corwin Press. Also based on concepts from Ecological Systems Model discussed in *The Ecology of Human Development: Experiments by Nature and Design*, by U. Bronfenbrenner, 1979, Harvard University Press. Copyright 1979 by the President and Fellows of Harvard College.

Bronfenbrenner's (1979) Ecological Systems Model informed the levels of support needed for students who have deficits in one or more domain of their development. The two school divisions who were a part of this study currently uses the CR to assist students and staff by providing a continuum of supports along the tiers of intervention. CR consists of four tiers of support:

- Tier 1 is the universal classroom instruction.
- Tier 2 supports are provided to students by the classroom teacher in the classroom, and teachers collaborate to share different strategies, accommodations, and interventions.
- Tier 3 supports are delivered by professionals other than the classroom teacher. These can be designed to support students across grade levels and are ideally delivered inclusively in the classroom.
- Tier 4 is the specialized tier that offers intensive and individualized supports. It may involve outside resources, agencies, and further testing.

Most Response to Intervention (RTI) models include pyramids characterized by three tiers, with Tier 1 providing universal supports with equity and differentiated instruction at the core. CR differs from RTI in that it has developed a four-tier continuum of supports, with the universal tier separated into two parts. This distinction is an effective approach that supports students and staff to hold collaborative conversations that evolve as they relate to instruction, as well as engage in ongoing capacity building (Hewson & Hewson, 2022).

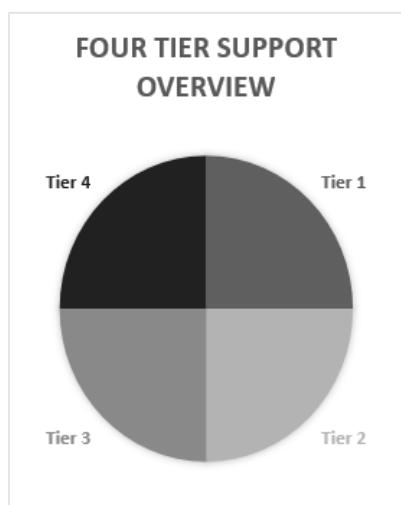
Figure 2 provides an overview of the four tiers, showing how CR differs from three-tiered RTI models. The CR approach provides a framework within which to articulate supports to respond to the needs of students beyond foundational classroom instruction, with increasing intensity and support at each subsequent tier.

## Figure 2

### *Four-Tier Support Overview*

The Four Tier Support Overview, referenced in Collaborative Response, provides a framework within which to articulate supports to respond to the needs of students beyond foundational classroom instruction, with increasing intensity Chart Area at each subsequent tier.

By establishing a school-wide continuum of supports, schools can ensure a collaborative response to support inclusive practices.



#### Tier 4

##### Intensive Supports

Intensive supports at the Tier 4 level are individualized and typically articulated in an individual program plan developed for the student by a collaborative team. At this Tier, outside resources, agencies and further testing may be accessed.

#### Tier 3

##### School Supports

Tier 3 supports are delivered by professionals other than the classroom teacher. These can be designed to support students across multiple classes and grade levels and are ideally designed to be delivered inclusively in the classroom.

#### Tier 2

##### Classroom Supports

Tier 2 supports are provided to students by the classroom teacher, inclusive in the classroom. By articulating these supports school-wide, teachers essentially collaborate to share differentiated strategies, accommodations, and interventions that work for students.

#### Tier 1

##### Classroom Instruction

Effective research-based instruction is foundational for success of students and essential when implementing school-based support models. Tier 1 honors and recognizes the essential work of teachers in the classroom.

*Note.* Adapted with permission from *Collaborative Response: Three Foundational Components That Transform How We Respond to the Needs of Learners* (p. 181), by K. Hewson and L. Hewson, 2022, Corwin Press. Copyright 2022 by Corwin Press.

CR is a system of processes that can transform how schools respond to the needs of students. The model involves SST meetings, a pyramid of interventions, and assessments of interventions. According to Hewson and Hewson (2022), the core beliefs of CR are as follows:

1. All students can learn.
2. Teachers make the greatest impact on student learning.
3. Schools cannot achieve high levels of success with adults working in isolation.
4. Leadership is responsible for ensuring structures for collaboration.

The CR approaches for intervention are grounded in the theoretical framework of Bronfenbrenner's (1979) Ecological Systems Model, which informs school teams of what structures are influencing the development of the child.

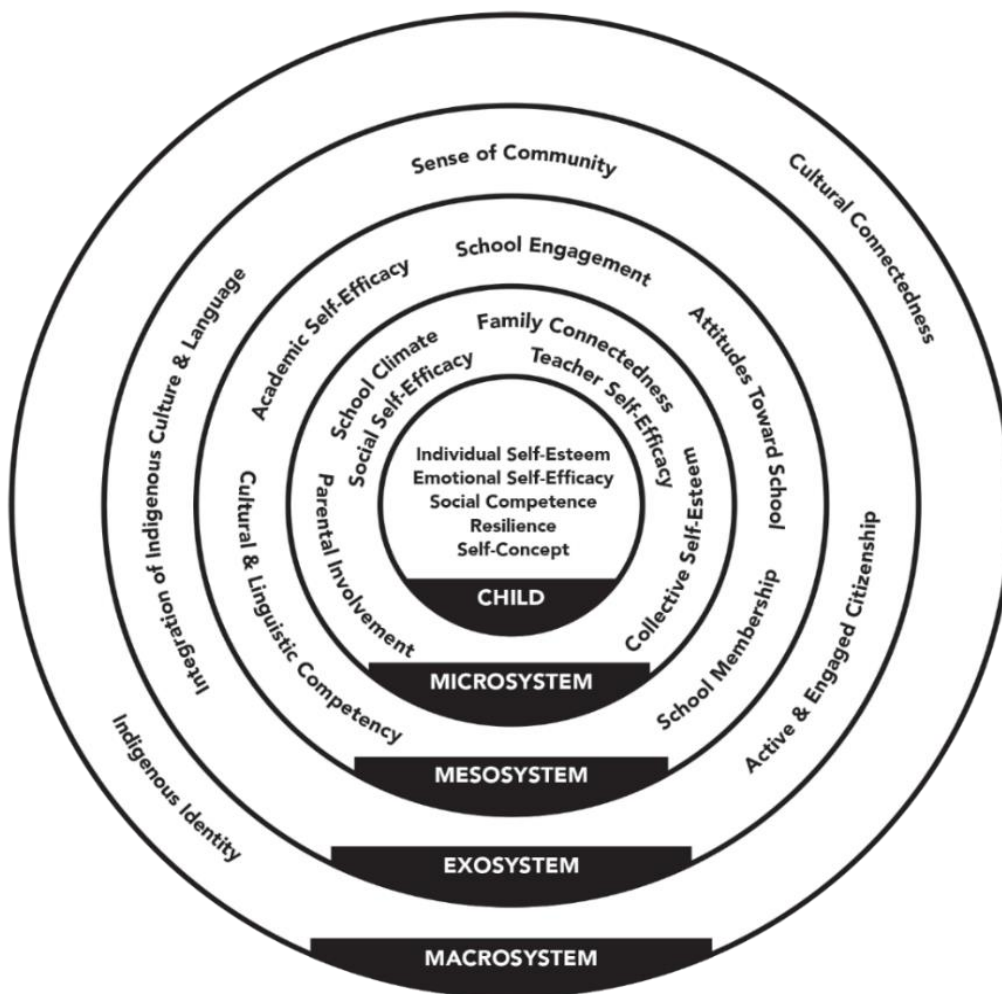
CR owes much to and is comparative to other tiered models of intervention—predominantly, the RTI model. However, CR is unique in having a responsive continuum of supports (tiered-level supports to meet student needs at varying levels of support), data, and evidence. Most important, the model requires teachers who are dedicated to the shared goal of working collaboratively on solutions to problems and meeting student needs. This shared work in the CR team relies on teachers with a desire to deepen their teaching and learning with every conversation. The structures in CR hold teachers accountable to focus on key issues and continually grow everyone's teaching tools. The CR framework was kept at the forefront while addressing the research questions to ensure that every tiered intervention attempts to support students along a continuum of need modeled after the Ecological Systems Model (Bronfenbrenner, 1979).

## **Theoretical Framework**

Bronfenbrenner's (1979) Ecological Systems Model is often used to depict how social, environmental, and biological factors all work together. This theoretical model explains how trouble in one domain results in difficulties in another. Moreover, it posits that interrelated practices are increasingly complex and that interactions between students and teachers are correlated (Mc Guckin & Minton, 2014). This framework grounds the continuum of supports and guides the researcher to understand if the literature review has identified some but not all the students who are at risk of dropout based on difficulties within domains of the youth's support systems. Bronfenbrenner's model was introduced 40 years ago, yet the theory is still used today to help researchers identify and plan research across a variety of fields that includes social, behavioral and educational domains (Onwuegbuzie et al., 2013). Because the model centers on relationships, research involving philosophy, policy, and practice can be linked to it (Onwuegbuzie et al., 2013). The original theoretical model consisted of four ecological systems: microsystem, mesosystem, exosystem, and macrosystem (Bronfenbrenner, 1979). A child's ecological systems require support when there are issues in any one of the domains; therefore, the framework helps educators to focus the supports that are needed in school environments to address this issue. Figure 3 depicts the systems involved in a child's development. These four systems are explained in more detail below.

**Figure 3**

*Bronfenbrenner's (1979) Ecological Systems Model*



*Note.* Adapted from *Making Human Beings Human: Bioecological Perspectives on Human Development* (p. 80), by U. Bronfenbrenner, 2005, Harvard University Press.

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Bronfenbrenner's (1979) Ecological Systems Model supports teams of committed staff because it provides the analytic lens to map a child's ecological systems. This is a lens that assists in identifying strengths and areas for support within systems that

contribute to the development of the child. The model suggests that the immediate environment and the interaction of the larger environments have effects on a child's development. With this ecological focus partnered with a collaborative effort, teachers can learn where to target broken systems and offer supports that will have a positive influence on the shared vision to improve student academic and social outcomes.

The microsystem is the closest context to the individual and includes interpersonal relationships and interactions with those closest to the person. These relationships include parents, family, and teachers (Onwuegbuzie et al., 2013). Research involving the microsystem includes people or groups who are explored within the context of their immediate environment. One collective case study took place over a 5-week period. Using purposive sampling to interview 11 mentors involved in the school-based mentoring programs, Frels et al. (2013) sought to understand better ways to retain and engage mentors for longer-lasting relationships and to provide a sense of connectedness for students. The study advanced understanding of ways to retain mentors by recognizing (a) Bronfenbrenner's (1979) Ecological Systems Model can help understand social and cultural points of involvement in the community; (b) interdependent mentoring relationships can occur if dyadic relationships exist; and (c) mentors can be expert at mentoring (Frels et al., 2013).

The second level of Bronfenbrenner's (1979) model is the mesosystem, which includes interactions and direct influences with the microsystem, as well as interconnections between all systems. Bronfenbrenner defined the mesosystem as the relatedness between two or more settings where the child participates, such as the home, school, or neighborhood peer group. Thus, family and school members are a part of this

system (Mc Guckin & Minton, 2014). Studies involving the mesosystem look at individuals or groups within the system in which they participate. One quantitative study that fits in the mesosystem realm of research focused on how parental involvement related to student academic performance and school engagement. In this study by Al-Alwan (2014), 671 Grade 9 and 10 students completed two surveys on parental involvement and school engagement, and the data were analyzed using means and standard deviations. The results were consistent with a causal model where achievement performance is directly influenced by school engagement and indirectly by parental involvement.

The exosystem, the third level of the Ecological Systems Model (Bronfenbrenner, 1979), involves one or more settings where the individual is an active participant; however, they are impacted by events in which they are not actively involved. Examples provided by Poulou (2014) include a child's active involvement with the family and the lack of involvement in the father losing his job. Another example is a child being actively involved in their school, but not being an active participant in their teacher relocating to a new school.

The macrosystem is the fourth and highest level of the Ecological Systems Model. It includes the larger cultural framework of the society and community within which the individual is actively involved (Poulou, 2014). This fourth level includes social ideologies, cultural beliefs, laws, and policies that are shared among members of the community where the individual participates .



## **Risk Factors Impacting High School Completion**

No single risk factor can accurately predict school dropout; the prediction is more accurate when several risk factors are present (Neild et al., 2008). Risk factors that are identified as early as a student's late elementary years can predict dropout patterns, and by the student's freshman year they can be quite accurate (Bowers & Sprott, 2012). As determined by a review covering 30 years of research literature, Bowers and Sprott (2012) further asserted that some dropout indicators are more accurate than others. In on a longitudinal study of 1,470 students in Grade 10 across 750 U.S. schools, the researchers interviewed the students in Grade 10 and followed up on whether they completed high school 4 years later. Bowers and Sprott heeded the need for early warning systems to target at-risk youth early in their dropout process. They were able to group early school leavers into three subcategories linked to engagement factors: quiet, jaded, or involved. Each dropout, according to their research, could have been circumvented with early warning indicators and specific targeted interventions linked to their typology. Researchers have asserted that the earlier the risk of dropping out can be detected, the greater the chance of preventing early school leaving (Balfanz et al., 2007; Legters & Balfanz, 2010; Stanley & Plucker, 2008; Uppal, 2017). Risk factors for dropping out, according to research, can be divided into the following subgroups: status risk factors (socioeconomic status, native language, family dynamics, parent level of education, and academic ability) and alterable risk factors (academic failure, retention, attendance, behavior, and early aggression; Uppal, 2017).

### ***Status Risk Factors***

**Socioeconomic Status.** Researchers have found that a large population of high school noncompleters have low socioeconomic status (Mac Iver & Mac Iver, 2010; Rumberger, 2011; Uppal, 2017). In a like manner, graduation rates, according to Stanley and Plucker (2008), are much lower in areas with a concentration of high poverty. Likewise, Rumberger (2011) acknowledged that economic factors influenced about 20% of dropouts who reported in a study that they needed to leave school to work to better support their families. Uppal (2017) postulated that in 2016, half of women and more than one-third of men without a diploma were not in employment, education, or training. According to research, socioeconomic status is one of the leading factors that contributes to students' early school leaving and continues to keep this population in poverty after they leave school (Rumberger, 2011; Taylor et al., 2017; Uppal, 2017).

**Minority Learners and Native Language.** Research has affirmed that students from minority populations (e.g., visible minority, immigrants, English as a second language, and ethnic minority) fail to graduate from high school at a larger rate than nonminority learners. In Alberta, Canada, 36% of Indigenous students did not graduate from high school (Uppal, 2017). There have been several studies to ascertain why First Nation students drop out of school at a higher rate than their white counterparts (MacIver, 2012). Research supports that schools that provide and acknowledge the need for cultural training that addresses how to teach in ways that allow minority learners to meet curriculum through their lens and worldview have more success with minority learners (Gay, 2013; Hammond, 2014). Hammond (2014) further defined culturally responsive teaching as a rigorous process that extends beyond mere awareness of ethnicity.

Culturally responsive teaching consists of four essential elements: (a) awareness and knowledge within a cultural lens, (b) partnerships that foster student ownership of learning, (c) understanding the challenges the learner of cultural peculiarities and how they relate to people's everyday lives, and (d) student voice and agency, within a community of learners and using the principles of restorative justice. In today's context, there is no doubt that a more dynamic view of culture is evolving. This has resulted in new and improved definitions for culturally relevant pedagogy 2.0 (Gillborn & Ladson-Billings, 2020; Ladson-Billings, 2014).

MacIver (2012) reported on interviews with 10 Indigenous students of high school age who demonstrated risk factors that lead to dropping out. The researcher affirmed that peer pressure, cultural influences, racism, goal setting, and relationships were their barriers to success in school. Furthermore, the interview data suggested that teachers needed to pay attention to the students' individual learning needs and their Indigenous heritage and form relationships with them. Several researchers have indicated that paying attention to cultural differences had a strong positive impact on student engagement in school (Gay, 2013; MacIver, 2012; Rogers, 2021). Further, researchers promoting supporting minority learners requires a discourse that works to "white out" racial inequity in policies, in favor of race-less languages of diversity, neutralizing the whiteness inherent in public education (Gillborn & Ladson-Billings, 2020; Rogers, 2021).

**Family Dynamics and Parents.** Several researchers reported that parents suffer long term with lower levels of education and have less incentive to integrate into the labor force. This lack of incentive to work is noted to be a result of the costs associated

with childcare (Kingston et al., 2016; Uppal, 2017). Further, Uppal (2017) reported that young adults with lower levels of education are more likely to have more children. According to the research, these children are at a disadvantage prior to the start of their education. One case study by Kingston et al. (2016) found a need for sustainable tiered intervention supports to address the issues surrounding low-income parents, and more specifically, the issues linked to single parents. They noted that poverty had noteworthy developmental impacts on children and discussed the importance of funding communities with high risk factors for dropout. The researchers linked their work in implementing the model of Communities That Care in helping youth of varying ages deemed to be at risk due to their family dynamics. Some of the supports included in the model were literacy work, affordable childcare, laundry support, food, translators, and sponsored community gatherings. Research has also highlighted the importance of national levels of supports to curtail the negative risk factors on youth development (Patient Protection and Affordable Care Act, 2010; National Prevention Council, 2011). To support students in school requires supporting other systems and networks that impact them, which will promote their ability to learn when in school (Bronfenbrenner, 1979; Kingston et al., 2016; Stewart, 2011). Within school settings, it is imperative to understand the historical emotional, academic, and cultural aspects of students and families that have had a negative impact on learning.

### ***Alterable Risk Factors***

Researchers have affirmed that having disabilities, including mental health issues and traumatic experiences, can affect educational attainment (Porche et al., 2011; Uppal, 2017). Duke (2020) asserted in her quantitative study of 81,885 students in Grades 9 to

12 that adolescent adversity, school attendance, and academic achievement were significantly associated with adverse childhood experiences. Further, Duke concluded that experiences of adversity were associated with poorer scholastic outcomes, prospects for health, and status associated with adulthood. Knowledge of a youth's strengths and weaknesses within systems will put educators in a position to support teaching and learning that accounts for the student's abilities, traumatic histories, and cultural frames of reference.

Recent studies have affirmed that students who experience trauma are at a higher risk for academic failure and subsequent dropout (Porche et al., 2011, Uppal, 2017). Students can be triggered (causing aggression and avoidance behavior) by an organization's practices. Avoidance behavior includes acting up, leaving class without permission, skipping class, and other distracting actions that mask trauma related emotions. In a trauma-informed environment, staff need to have training that recognizes practices that trigger painful memories and retraumatization of students with traumatic histories (Brendtro et al., 2019; Plumb et al., 2016; National Center for Education Statistics, 2021). Further, the department of Substance Abuse and Mental Health Services Administration (2014) asserted that there are six key principles of a trauma-informed approach: safety; trustworthiness and transparency; peer support; collaboration and mutuality; empowerment; and cultural, historical, and gender issues. An educator with trauma-informed pedagogy understands that using any form of physical contact on a person who has been sexually abused or placing a child with a history of neglect in a seclusion room may be retraumatizing to the student and drastically interfere with their

ability to learn (Brendtro et al., 2019; National Center for Education Statistics, 2021; Perry & Szalavitz, 2017).

The Canadian Survey on Disability (2012, as cited in Zwicker et al., 2017) reported that men and women who did not achieve a high school diploma were 11% more likely to have one or more disabilities. Educators are able to positively bridge supports in order for students with disabilities to find success in school; however, educational systems have only recently begun to direct attention to psychosocial support and intervention services (Porche et al., 2011). Katz (2018) described the teacher as having an *invisible hand* and other researchers have described the teacher as integral in creating environments that induce *felt safety*, helping to improve the social status and sense of safety of students with trauma or disabilities (Brendtro et al., 2019; Perry & Szalavitz, 2017). Further, Katz (2018) offered a holistic framework that can bridge student and teacher understandings of trauma (cultural and emotional) as well as support the mental health needs of all students. A culture of well-being in healthy school communities is nurtured through (a) intrapersonal well-being, by developing awareness of brain regulation, distress, resiliency, exercise, identity, hope, and joy; (b) interpersonal well-being, by developing generosity, altruism, positive relationships, belonging, connection to land, culture, and social niche; (c) Indigenous worldview, by developing a recognition of discrimination and historical wrongs, a sense of purpose related to healing, and an appreciation for the perspectives of all people; and (d) spiritual well-being, by developing a sense of purpose, belief in the meaning of one's life, and skills in spiritual connection.

Moreover, Katz (2018) posited that building flourishing learning communities involves (a) building schools that are *ensouled*, which means education that embraces the

belief that all humans have purpose; to “ensoul” students, educators must recognize that all humans are wired for connection, appreciation, respect, and meaning; (b) ensuring well-being for educators, which means fostering a balance between self-actualization and playing a valued role in one’s community; (c) acknowledging the Truth and Reconciliation Commission of Canada’s calls to action to promote healing for people who were negatively impacted by colonialism and discrimination; and (d) utilizing her Three-Block Model of Universal Design for Learning (UDL), which includes the four pillars of self-worth, belonging, cognitive challenge, and social interactive learning. Ensouled schools incorporate programming for well-being, as compared to curricular lessons, and provide lessons that cultivate a caring classroom climate and the interpersonal and intrapersonal skills required to have a positive school experience (Katz, 2018).

Research has shown that students with varying abilities need high-quality teachers. One study described these high-quality educators as *star teachers* and asserted that a star teacher’s approach to at-risk youth sets students up for success (McKinney et al., 2008). Moreover, Haberman et al. (1995) said star teachers do the following: (a) protect children’s learning, (b) have persistence, (c) provide an approach to support at-risk students, (d) put theory into practice, (e) provide professional/personal orientation to students, (f) admit fallibility, (g) have emotional and physical stamina, (h) show organizational ability, (i) offer an explanation of teacher success, (j) deliver explanation of children’s success, (k) engage in real teaching, (l) make students feel needed, (m) consider the material versus the student, and (n) deliver gentle teaching in a violent society. Hammond (2014) depicted high-quality teachers as *warm demanders*, suggesting

the teacher marries high expectations with genuine care and interest in their students, which accounts for a student's opportunity to have success in the classroom. Similarly, Glass (2013) and Farmer et al. (2018) determined that teachers can improve the social standing of kids by bridging their acceptance which means verbalizing the student's gifts to others, thus bridging their belonging in the classroom. Several researchers have asserted that when students were included and felt a sense of belonging, they performed better academically (Hammond, 2014; Katz, 2018; Mowat, 2010).

The cost to society is very high when students do not complete school, and a sense of belonging is needed for students to want to stay in school until they achieve their high school diplomas (Hammond, 2014; Taylor et al., 2017; Uppal, 2017). Because the cost to society is high when students do not graduate, it makes sense to be proactive and invest in strategies to help all learners feel a sense of belonging in school (Brendtro et al., 2019; Uppal, 2017). The research suggests that schools need to create learning environments that mirror 21st-century realities by enhancing inclusion and engagement for those with mixed abilities and ethnic backgrounds. Inclusive ways to organize for learning within and across schools and systems, including through differentiated instruction and student-led learning, can thwart the disengagement that leads learners to drop out (Ginwright & Cammarota, 2015; Howard, 2016; Sleeter, 2014). When students are included and feel a sense of belonging and purpose, they identify more positively with learning, are motivated, and experience dramatic improvements in academics (Fullan et al., 2020; Hattie et al., 2016, as cited in Donohoo & Katz, 2017; Sleeter, 2014). The risk factors for early school leaving are well researched, it is time to move toward the



research surrounding what can be done to mitigate the risk and support all students to succeed in school.

### **Supports That Assist Youth to Graduate**

Supports for youth to stay on track to graduate are explained through the following themes: leadership, high-quality collaborative teaching, inclusive and caring educational environments, and collaborative support structures.

#### ***Leadership***

For all phases of a school's change or growth process, school leadership is considered vital and creates the conditions for moral commitment (Sergiovanni, 1998). Leadership to support students who have been marginalized within school systems must promote peace, acceptance, and respect for diversity (Hammond, 2014; Katz, 2018). In an international review of school leadership, Sammons et al. (2014) noted that there are increasing demands of leaders to support broader social goals, higher standards, and more accountability. The quantitative data of this mixed method study was coalesced with the themes of the qualitative data to create eight themes: (a) defining the vision, (b) improving conditions for teaching and learning, (c) redesigning organizational roles and functions, (d) enhancing teaching and learning, (e) redesigning the curriculum, (f) enhancing teacher quality, (g) establishing relationships within the school community, and (h) building relationships outside the school community. The following subsections of vision, distributed leadership, relational trust, inclusive practice, and systemic represent the leadership principles deemed noteworthy by Sammons et al. to foster improved learning for all students.

**Vision.** Shields (2018) found that if principals do not identify a shared focus, they are not able to guide their staff in developing and articulating a collective vision for their students or their school. Additionally, leadership is a dynamic process involving many individuals (Fullan et al., 2017; Quinn et al., 2019; Shields, 2018). Educational leaders must be very clear in communicating their vision for shared work, aligning values within the larger context, and setting high expectations for performance (Allen, 2020; Donohoo & Katz, 2017; Grissom et al., 2021; Hallinger, 2011; Shields, 2018). Principals have been shown to play a key role in shifting school culture to bring their vision to reality (Sinek, 2014). School leaders can have influence over the structures and policies that impede the success of students who are at risk of not completing high school (Fullan et al., 2017; Northouse, 2019; Quinn et al., 2019). For example, the principal can ensure that timetables address targeted times where additional support can be offered to students who are facing challenges in meeting their academic outcomes. They can also slate specific classes like Foods at the beginning of the day to ensure that marginalized learners have access to food first thing in the morning. MacIver and Groginsky (2011) asserted the need for system leaders to coordinate with a wide range of stakeholders (mental health, juvenile justice, child welfare, and workforce development) along with aligning funding sources to maximize positive student outcomes and finally coordinating data on dropout prevention (attendance, behavior problems, and course failures).

**Distributed Leadership.** Distribution of leadership is one of the key factors in implementing a collaborative support system for students and teachers. Studies indicate that distributed leadership, development of the organization, and student success are intertwined (Hargreaves & O'Connor, 2018; Heck & Hallinger, 2014; Leithwood et al.,

2010). Distribution of leadership has positive effects on teachers' professional development (Kennedy et al., 2011), student engagement, realization of changes, and commitment to shared goals (Leithwood et al., 2010). Shared leadership, collaborative leadership, instructional leadership, and distributed leadership all require that the principal's personal leadership training is essential in fostering the leadership of others (Fullan, 2018b; Goddard et al., 2015; Grissom et al., 2021; Hallinger, 2011). SSTs and the CR offer a distributed way to share the leadership responsibility for ensuring that all students can reach their highest potential despite social, environmental, or biological deficits (Bronfenbrenner, 1979; Hewson & Hewson, 2022).

**Relational Trust.** The great blind spot for many leaders serving youth is focusing on the basics, and the most basic need of children is to trust (Brendtro et al., 2019). Effective leaders are those who can develop both trust and talent in previously disengaged learners (McDonald et al., 2013). Lencioni (2002) depicted the five dysfunctions of team as follows: absence of trust, fear of conflict, lack of commitment, avoidance of accountability, and inattention to results. At the foundation of effective teams is trust (Lencioni, 2002; Sinek, 2014). Further, Sinek (2014) asserted that a strong safety culture cares about the product or service, about standards and about exceeding expectations, with concern for the well-being of others. Humans have a biological need to feel safe (Brendtro et al., 2019; Hammond, 2014) and are motivated to stay safe—but taking risks is important for healthy growth and development. Leaders can be thought of as the invisible hand to support structures to create trust for the improvement of teaching that, in turn, creates the same systems of trust for students. Human brains link pain and pleasure with biosocial values, and the need to belong is among one of the highest

psychological needs for positive development (Brendtro et al., 2019). To belong is to be included.

**Inclusive Education.** The call for more inclusive reconstruction within the K–12 system around marginalized groups and how they are viewed in society is growing. School leaders have an important role in ensuring school structures are inclusive (Katz, 2018; Quinn et al., 2019). However, an element of systemic reform is needed at the district and postsecondary level as well (Darling-Hammond et al., 2017; Mac Iver & Groginsky, 2011).

Our society requires a shift from deficit systemic structures (codes, labels, disorders) to more inclusive, strength-based approaches to improving the lives of students who require additional support for school success (Brendtro et al., 2019; Quinn et al., 2019). The intervention responses, often referred to as RTI, need to be viewed with a lens of relational support as opposed to behavioral support (Brendtro et al., 2019).

**Systemic Change.** A review of the research on systemic change shows a positive correlation between systemic change and the behaviors, practices, and beliefs of successful leaders in organizations (Bolman & Deal, 2017; Grissom et al., 2021; Senge, 2006). Interpersonal elements can enhance or undermine relationships. The range of dynamics within organizations requires a gentle balancing act for those who lead change. Practice and assumptions can lead to polarization—either alienation or hostility—or high levels of commitment and motivation (Fullan, 2018b; Lencioni, 2002). The practice of implementing systemic change in schools has crossover with the area of nuanced leadership, the role of lead learners, healthy school communities, and deep learning (Fullan, 2018a; Katz, 2013). Leaders have the task of ensuring that they support the

processes that have the greatest effect on student learning. Leaders need to move past what works to what works best to provide instructional leadership that focuses on deep learning for all students (Grissom et al., 2021; Hallinger, 2011; Hattie & Timperley, 2007). Further, leaders in Alberta, Canada are tasked with retaining teachers to the profession, as they are facing a large turnover with baby boomers retiring from the profession. In Alberta, Canada, 40% of beginning teachers leave teaching within 5 years (Schaefer et al., 2012). It is important for leaders to build these processes, over time, to create environments of trust. Time is needed to ensure that leaders can provide the instructional leadership needed to build the capacity of veteran teachers, support new teachers and utilize the processes with the highest impact to retain teachers to the profession (Fullan, 2018a; Kotter, 2008). In rural divisions, the task of keeping leaders in place, and teachers in the same schools long enough for this to occur can be a concern (Schaefer et al., 2012). Time for true systemic change takes 5 to 10 years and is important for system leaders to consider (Kotter, 2008). Further, the effect size (a measure of positive impact) of principals is the second-most-important school factor affecting student learning (Leithwood et al., 2010; Grissom et al., 2021). Finally, leadership is a process of influencing others to achieve goals (Bodla & Nawaz, 2010). Leaders have influence to shape the school culture (Hallinger, 2011) that supports and inevitably leads to high-quality teaching and inclusive practices (Bodla & Nawaz, 2010, Fullan, 2018a; Hattie, 2012). Keeping leaders in schools long enough to impact positive change is essential for systemic change (Kotter, 2008).

### ***High-Quality Collaborative Teaching***

Several researchers have posited that the educational success of at-risk youth is strongly related to high-quality teaching. Hattie's (2009, as cited in Hattie & Yates, 2014) synthesis of over 800 studies discusses the relevance of 138 factors for student achievement, emphasizing the importance of a focused approach in education on the factors that have a substantial effect size. High-quality teaching requires high-quality instruction, noted to have an effect size of 1 (Hammond, 2014).

**Differentiated Instruction.** Researchers have asserted that high-quality teaching involves engaging every learner and differentiating instruction to meet their needs (Hammond, 2014; Imbeau & Tomlinson, 2010; Katz, 2013; Moolenaar et al., 2012). Materials and training on diversity in general preservice teacher education do not appear to have kept up with the current educational realities. However, it is impossible to have a preservice program address all of the needs that teachers will encounter in their work. It is quite difficult to teach what is not known, and too many teacher education programs fail to prepare beginning teachers for the academic and multicultural diversity that they will face in their classrooms (Gay 2013; Haberman, 2005; Mac Iver & Mac Iver, 2010; McKinney et al., 2008). A school's leadership can have an impact on supporting the structures that will improve differentiation, fostering understanding of engagement, and supporting the collaboration needed to grow the skills of teachers as the landscape of needs continually shifts. This ongoing network of collaborative learning is necessary in today's complex learning environments (Fullan et al., 2018).

McKinney et al. (2008) found in a quantitative study of 59 student interns that were placed in urban school settings that teachers in high-poverty schools regressed in

effectiveness after their internships. They determined that teachers who did not score high on Haberman's (2005) star teacher characteristics questionnaire did not have success in high-poverty urban schools. (Haberman's work is notable because his research focused on a diverse, high-poverty district, and he was looking to grow teachers via a teacher preparation model where staff who represented the community (culture and language) could complete college and become teachers in their communities. His work looked at general characteristics of quality teachers, but more specifically for the very diverse group within this high-demand environment.) Moreover, McKinney et al. concluded that traditional teacher preparation programs failed to prepare teachers for the complexity they faced and found that their motivation and commitment diminished with the demands, despite having coaches throughout their internships. The study concluded that more work needs to be done in preparing teachers during their preservice training to address the diversity they will face in their practice experiences. McKinney et al. asserted that teacher selection is the key to success for interns in high-poverty urban schools. Further, more mature teachers, who can function at a higher conceptual level, would have more success in urban school settings.

**Culturally Responsive Teaching.** To improve teaching, systems have to work on preparing and supporting beginning teachers with the diversity they will face in their teaching environments (Darling-Hammond et al., 2017; Gay, 2013; Hammond, 2014; Katz, 2018). McDermott and Rothenberg (2000) triangulated data from three focus groups that consisted of parents, teachers, and students to identify the characteristics required to be an effective teacher in high-poverty schools. Their research suggested that the practices necessary for effective teaching of at-risk learners include (a) building

trusting relationships with both parents and students, (b) communicating frequently with families, (c) demonstrating high expectations, and (d) having the dispositions and skills to connect classroom content with the life experiences of students.

When educators teach in culturally responsive ways, all students benefit (Darling-Hammond et al., 2017; Hammond, 2014; Taylor et al., 2017; White & Hoffman, 2007). Further, research has shown that those teachers must work in collaboration to improve teaching, recognize cultural bias, and teach in culturally responsive ways (Fullan, 2012; Hammond, 2014). Gay (2013) offered hope in affirming that culturally responsive teaching can indeed be taught but has failed to emerge as mandatory learning at the college and university levels. Many at-risk learners come from ethnic minority populations. To make any significant gains with ethnic minorities in the school system, educators have to begin offering these learners the right to learn from their own cultural frames of reference and dissociate themselves from European American cultural norms (Brendtro et al., 2019; Darling-Hammond et al., 2017; Gay, 2013; Hammond, 2014).

To address the diversity in classrooms, teachers need to work together to stay abreast of the strategies that impact student learning. This is best tackled from a team approach to get many perspectives on approaches that work to improve learning for all students.

**The Role of Belief in Student Achievement.** A teacher's collective efficacy has an effect size of 1.57 and is one of the drivers that Hattie and Clarke (2018) asserted must be emphasized, supported, and promoted. Further, Fleckenstein et al. (2015) conducted a study that used Hattie and Clarke's effect size factor research and directly compared it with the beliefs of 729 novice and experienced teachers. The research revealed that



experienced teachers had beliefs that were consistent with empirical data about what constituted effective teaching. The study revealed that experienced teachers focused on differentiating instruction, goal setting, setting high standards, and developing relationships with their students. Conversely, novice teachers and preservice teachers in this study had beliefs that were tied to their teacher preparation programs, and this training did not prepare them enough for the diversity that they were facing in their teaching. This finding caused Fleckenstein et al. to call for a paradigmatic shift in teacher education training. Given that a teacher's belief in a student's ability to achieve has the effect size of 1.62 on a student's success in school, preservice programs and internships need to foster this training (Donohoo et al., 2018; Hattie & Clarke, 2018).

It is well documented across qualitative and quantitative studies that teacher quality is the single most accurate indicator of students' academic success (Hattie et al., 2016, as cited in Donohoo & Katz, 2017; Fullan et al., 2017; Imbeau & Tomlinson, 2010; Leake & Boone, 2007; McKinney et al., 2008). Overall, research has solidified recent trends in education regarding combining high-quality teachers, using collaborative approaches, with high-need students (Imbeau & Tomlinson, 2010); however, there is a lack of research identifying how to best train teachers for working in these environments. With so many children showing risk factors for early school leaving, it is imperative to find ways to better prepare teachers for educating these students. Snook et al. (2009) stated that high-quality teachers have an effect size of 1.62, which indicates that it is a driver that schools need to support.

### ***Inclusive and Caring Educational Environments***

There is a noteworthy amount of literature that suggests at-risk learners can thrive in environments that are inclusive, caring, and help them feel as though they belong (Brendtro et al., 2019; Hammond, 2014; Katz, 2012; Katz et al., 2012). During the 1960s and 1970s, special education materialized around North America as a result of lobbying efforts by parents and stakeholders. This time period saw increased activism and case law supporting the rights to free and public education for all students (Yell et al., 2004).

**Inclusive.** Nilvius (2020) noted that teachers who are making regular adaptations to accommodate all the diversity in classrooms are also significantly more likely to provide accommodation for all students, thus contributing to their sense of belonging. General population students appear to benefit academically from teachers who can creatively adapt curriculum for a variety of learners and make efforts to develop relationships with their students. Students need to believe that their education is relevant and has meaning in their lives. In one study, Mac Iver and Mac Iver (2010) suggested a tiered intervention response, with several positive behavior supports to improve student learning. They asserted that there are many indicators of early school leaving, and therefore a tiered intervention, along with an early warning system when students exhibit warning indicators of quitting school, is an effective approach in targeting students' specific needs.

**Caring.** A strong body of research suggests students need to feel connected to their school so they can improve their achievement (Duke, 2020). Further, have researchers asserted that character education and social-emotional learning are a central responsibility of schools to support students with adverse childhood experiences, which

are present in so many profiles of students at risk of early school leaving (Collaborative for Academic, Social, and Emotional Learning, 2020; Duke, 2020). Researchers have asserted the need for educating all students and indicated that schools play a key role in addressing the academic and social needs of children.

**Culture of Belonging.** Many students who are deemed to be “at-risk” within school systems have learning disabilities (Rumberger, 2017; Uppal, 2017). Classrooms that adopt the principles of differentiated instruction do more for improving the performance of students with mild learning disabilities by continually encouraging them to present their learning using a strength-based approach (Katz et al., 2012). Perhaps the challenges associated with the assessment of academic achievement for children with disabilities, generally, have confounded the ability to draw conclusions about the impact of inclusion on their academic progress. The literature is, unfortunately, less conclusive in terms of measurable academic benefits to children with disabilities who are educated in fully inclusive environments. However, research supports the social gains made by inclusive practice (Katz, 2013; Katz et al., 2012).

The art of differentiated instruction and assessment for learning help to promote the success of disadvantaged learners; conversely, standardized testing does little to promote differentiation in the way that students express their understanding of learner outcomes in their respective courses (Apple, 2018; Au, 2010). Unfortunately, the pressure that teachers face with standardized testing often outweighs the pressure for providing instruction that promotes social learning, justice, and character education (Apple, 2018; Au, 2010).

A prominent goal of schools in society is to serve students in creating a life of dignity and purpose. The health of our species depends upon a shared understanding that what we have in common is more important than our differences. Everyone matters in a system in which all students are valued and can learn from their respective cultural frames of reference and strength area of ability. The pursuit of self-actualization, in collectivist models, is within each person. It is only when the development of self leads to the strength and development of the collective that a person arrives at cultural perpetuity (Katz, 2018). It does not occur without consideration of how one's individual gifts contribute to the common good of the community.

Cultural perpetuity goes beyond self-actualization. It is the legacy that will continue long after one's life (Katz, 2018). In such a critical time of globalization, if we wish to thrive and flourish as a society, being independent is much less important than being interdependent. For leaders, advocates, and catalysts for change, the reculturing of schools involves leading where everyone is included.

### ***Collaborative Support Structures***

Establishing strong collaborative teacher networks is necessary in order to promote student achievement (Fullan et al., 2017, 2020; Hammond, 2014; Moolenaar et al., 2010). There is limited research on universal, collaborative, whole school models to support the growing student needs that educators, leaders, and systems are currently facing in education (Darling-Hammond et al., 2017; Hammond, 2014; Katz, 2018). The escalation of the number of students in mainstream classrooms that have identified needs requires that school systems invest in additional resources and collaborative supports for teachers (Brendtro et al., 2019; Darling-Hammond et al., 2017; Katz, 2018). According to

Hammond (2014), not every student learns in the same way, develops at the same speed, or has the social and academic behavior or skill needed to succeed in school. As a result, supporting all students is in the hands of educators, leaders, and systems. This is not just in terms of what students learn, but how coaching, mentoring, collaborating, and sharing of learning occurs within and across systems. This approach is supported by Fulton et al.'s (2005) report for the National Commission of Teaching and America's Future and conclusion that collaboration is the key to a rewarding career that will attract and retain highly skilled professionals, resulting in higher-impact teaching and deeper student learning.

Further, recent research suggests that the relationship between student achievement and teacher collaboration is indirect. Teacher collaboration may benefit teachers' practice, which in turn will affect student achievement (Goddard et al., 2015). As entire systems in education look to other successful examples for supporting minoritized learners, it is imperative that school leaders provide professional learning opportunities for collaboration and sharing of best practice across networks to enhance opportunities for critical reflection and strategies to engage the disengaged (Darling-Hammond et al., 2017; Hammond, 2014; Ritchie, 2012). Aceves and Orosco (2014) posited that academic success for diverse learners can only be achieved when rigorous, ongoing professional development is provided to support diversity and responsive teaching practices. Further, they asserted that educators are in a better position when they can collaborate about how to integrate best practices to infuse relevant pedagogy and provide rich learning environments. Snook et al. (2009) maintained that effective professional learning should be as close to the practice of teaching as possible. Generally,

research on collaboration has suggested that it is best when it can become a part of one's professional identity, which requires alignment, working together, and being reflective while working toward collective goals (Senge, 2006; Sutherland et al., 2010). Senge (2006) posited that the collective struggle was necessary for the system to reach effectiveness. Further, Senge (2006) posited that collaboration was an imperative item to promote school effectiveness.

Ritchie (2012) conducted an in-depth qualitative study where eight teachers were asked to describe their critical teaching practice. The participants selected for the study were published and identified as being successful with critical pedagogy or teaching for social justice. Ritchie used inductive thematic analysis in determining themes. Being a part of a professional network played a role in educators being able to enhance critical teaching practice. The sharing of strategies and resources that were working was key to culturally responsive teaching. One network that teachers have consistently referenced for positive reform efforts is called Rethinking Schools (Hammond, 2014). Hammond (2014) wrote this networking is paramount in the ongoing professional learning required to support the ever-changing diversity in classrooms.

Collaborative networking gives schools the opportunity to evaluate their structures and processes to ensure that all students, including those without a diagnosis, are provided with the layered supports that they need. At the first sign of student struggle, professionals begin to discuss a system of intervention. The order of interventions is typically a learning plan for the student, a support team to address the needs, and a tiered-level RTI. Teachers cannot count on their preservice education alone to prepare them to support all of the students they will teach—this is especially true for special education

students (Björn et al., 2018). This supports the argument for continuing with ongoing professional learning and having a network of support throughout a teacher's career (Nilvius, 2020).

### **Models of Collaborative Support**

There are several other models of collaborative support: RTI, Multi-Tiered System of Support (MTSS), and UDL, each of which provides a system for students to access increasing levels of support (Lane et al., 2019). Prior to a detailed exploration of the CR approach, these other tiered interventions are explored.

#### ***Response to Intervention***

RTI is a popular system-wide approach that emphasizes helping students when they are experiencing academic failure. Some researchers have stressed that RTI is a model for inclusion and can serve as an alternate approach to special education, which segregates students from regular classroom settings (Grosche & Volpe, 2013). The phrase "Response to Intervention" came from the *Individuals with Disabilities Education Improvement Act* as well as the *No Child Left Behind* legislation (Nilvius, 2020). A successful RTI system is one that implemented high-impact interventions and evaluated the effectiveness of the supports that worked, as well as those that were ineffective (Nilvius, 2020). Designed from a public health prevention model (Caplan, 1964, as cited in Dykeman, 2005), RTI utilizes a methodology of prevention science. The school setting model involves a three-tiered system used to identify students who are struggling in school (Klingman, 1986; Klingman & Ben Eli, 1981). This system involves targeted interventions put into action to support individual students as they move through three tiers. Special education services are considered if all other interventions are ineffective.

RTI is characterized by systematic, repeated assessments of skills while professionals monitor the data to determine the tiered interventions needed for students (Fuchs & Fuchs, 2017).

In one research study, RTI Tier 1 reached about 85% of the population and relied on the high-quality instruction available in all classrooms. Every student had access to this tier. Tier 2 had an impact on roughly 10% of the population and was employed when instruction at Tier 1 was not enough, thus requiring a more targeted intervention to help the student meet academic needs. RTI's Tier 3 provided 5% of the student population with more intensive and targeted interventions (Johnson et al., 2010). Although RTI had success at the elementary levels, there were challenges with RTI success at the secondary level.

Studies at the secondary school level indicate that there are barriers to implementation at the high school level. One qualitative study by demonstrated that the following were barriers at the secondary level: (a) the structure of secondary schools, (b) a lack of evidence-based strategies, and (c) a need for more professional learning for teachers using RTI (Sansosti et al., 2011). In another study, Sansosti et al. (2010) reviewed the perceptions of principals relating to RTI at the secondary level. The results indicated that RTI was important in their schools; however, they asserted that the barriers listed above existed when implementing RTI in their schools. Duffy (2007) found the implementation issues at the high school level to be as follows: (a) structural issues, (b) professional collaboration, (c) professional learning, (d) screening tools across subject areas, and (e) high school appropriate intervention models.



Other researchers pointed out that secondary students have several teachers who are content experts and provide instruction for a restricted time, rather than one teacher all day long teaching all subjects. Working in silos of instruction, high school teachers do not have as many opportunities to collaborate and share instructional strategies with their colleagues (Johnson & Johnson, 2009). Likewise, Mellard et al. (2009) indicated that having several students rotating to different teachers led to less individualized attention for each student. If collaboration could occur more frequently, RTI strategies would be implemented with greater success. When teachers work together to develop interventions and identify support needed in Tiers 2 and 3, more students can get the support they need to succeed. When students struggle at the secondary level, they require intensive instruction to promote growth. Those functioning below their grade-level peers might benefit more from Tier 3 interventions (Fuchs et al., 2010).

Swindlehurst et al. (2015) explored RTI implementation using a Likert survey for administrators and showed that 75% of schools in the United States were not fully implementing RTI as intended. The results showed inconsistencies across schools and districts. Further, the researchers identified that leaders needed access to training in order to prepare staff for the work of supporting students in a holistic approach within the realm of general education settings. Therefore, it is important for leaders (both school and district) to become highly knowledgeable in evaluating the fidelity of RTI interventions (National Center on Response to Intervention, 2010).

To learn more about the effectiveness of RTI, Burns et al. (2005) conducted a meta-analysis of RTI research. They included 21 articles in a systematic literature search. The results showed that schools implementing RTI showed improvement in student

achievement (unbiased estimate of effect = 1.54) and systemic outcomes. They also concluded that there was a strong improvement for all mean and median effect sizes and that RTI had a robust effect on improved achievement and systemic outcomes. Fuchs et al. (2012) offered that more study is required to understand RTI implementation in secondary settings and cautioned that the RTI model can have unintended consequences when general education classrooms do not provide the tertiary (special education) supports that provide more intensive interventions.

A national dialogue is needed about meaningful access to education. Researchers caution that a rush to RTI approaches, which may implement broad screening processes, may not capture the instructional levels needed for students with serious learning disabilities. Fuchs et al. (2012) posited that forcing them through Tiers 1 and 2 before offering the intensive supports they require wastes valuable time and causes undue stress for learners. Moreover, these researchers discussed the use of smart RTI, where educators test the effectiveness of intensive supports as they build on foundational proficiencies and prerequisite skills to improve a student's rate of progress to meet grade-level goals. In Tier 3 instruction, the data collected on rate of progress might require the student to miss some aspects of their general education program from which they will not benefit (Fuchs et al., 2012).

Although the *Individuals with Disabilities Education Improvement Act* as well as the *No Child Left Behind* legislation and other organizations are founded on well-formed thoughts about RTI, groups have yet to develop a persuasive plan to meet the needs of the students who are the most difficult to teach (Fuchs et al., 2010). However, Nilvius (2020) wrote that there are challenges implementing RTI due to unclear responsibilities, a lack

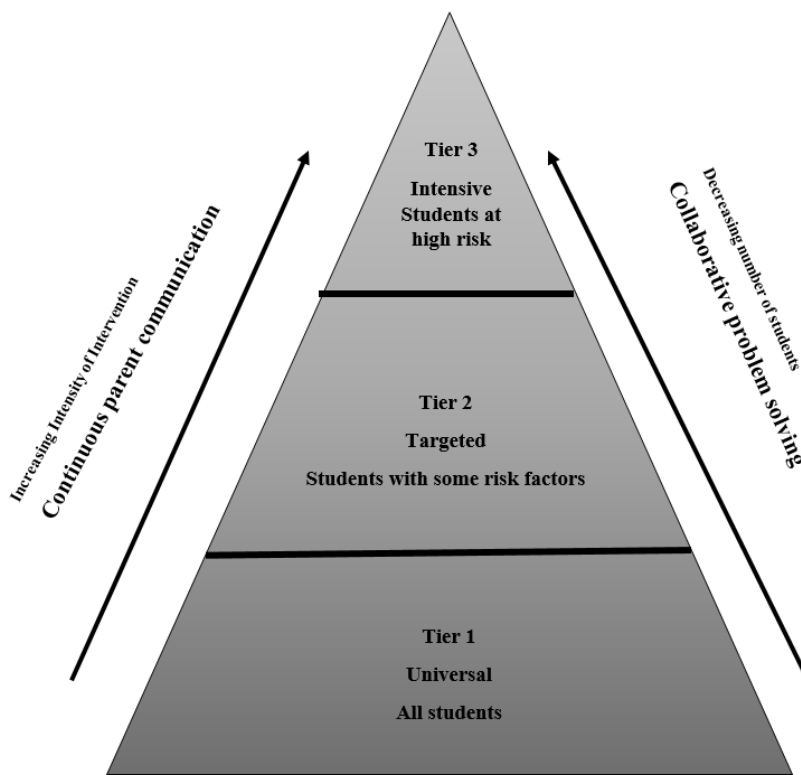
of implementation strategies, and a lack of time and resources to support special education students. Once those challenges are overcome, RTI can become a successful concept for inclusive education.

Because RTI and special education have become intertwined, stakeholders have promoted another tiered response in an effort to unravel that close connection. MTSS is explored next.

### ***Multi-Tiered System of Support***

MTSS is a set of evidence-based practices implemented across systems to meet the needs of all learners. When discussed, it is often in the company of RTI (Castillo et al., 2018). In essence, according to some researchers, MTSS is RTI without special education (Fuchs & Fuchs, 2017). Others have said the MTSS framework is larger than that of RTI (Splett et al., 2018). MTSS originated as an approach to ensure that a student's academic, behavioral, social-emotional, and mental health needs were addressed in an integrated approach (Splett et al., 2018). It is built on a system that intentionally focuses on leadership, professional learning, and creation of a culture that supports assessment, curriculum, and instruction (Castillo et al., 2018).

MTSS uses a pyramid model to show the level of support a student will receive based on evidence-based interventions (see Figure 4). There are three tiers of interventions (Florida Department of Education, 2018).

**Figure 4***Multi-Tiered System of Supports*

*Note.* Adapted from *Colorado Multi-Tiered System of Supports Practice Profiles* by Colorado Department of Education/Office of Learning Supports, 2022 (<https://www.cde.state.co.us/mtss/practice-profiles-all>).

In Tier 1, students receive explicit instruction in core classes within a model that meets the academic, behavioral, social-emotional, and mental needs of students. In Tier 2, the intervention goes beyond universal classroom practices and includes an extra layer of support that scaffolds learning. This level includes more explicit small group instruction, and more time and support to meet the mastery of standards required. In Tier 3, students require the highest level of support in terms of intensity and duration of the

intervention. This tier involves explicit and intense instruction that supports foundational knowledge and skill training that is missing in the student's profile of needs (Florida Department of Education, 2018). For the tiered-level interventions to be effective, the process and structures to support student needs must be established. The roles of the team members involved in MTSS need to be clear, followed, and reviewed. Dundas (2021) posited that the team members of MTSS have the following roles and responsibilities:

1. Administrative Representative

- Provides leadership at MTSS/RTI team meetings
- Facilitates monitoring of instructional integrity within grade levels/departments
- Ensures progress monitoring for all students in Tiers 2 and 3 (both for students with IEPs and those without IEPs)
- Ensures school schedule and resource allocation enables a successful MTSS practice
- Celebrates and communicates success

2. MTSS/RTI Team Coordinator/Facilitator

- Coordinates and sets agenda for MTSS/RTI team meetings
- Provides expertise to MTSS/RTI team regarding problem-solving protocol
- Provides expertise in data analysis
- Identifies trends in student/staff need across school

3. Grade-level/Content Area Representative

- Serves as a liaison between PLC/grade-level/department team and MTSS/RTI team

- Attends grade level PLC/MTSS/RTI meetings on a regular basis
  - Identifies trends in student/staff need across grade-level or content area
  - Presents data/background information on student being discussed (in absence of classroom teacher)
4. Specialists (rotating members including ELL teacher, speech/language pathologist, intervention teacher, behavior specialist)
- Provides expertise to MTSS/RTI team regarding interventions and skill remediation
  - Supports MTSS/RTI team with data interpretation and ensures linkage of data to selected interventions
  - Gathers progress monitoring data from PLCs and Tier 3 interventionists for review during MTSS/RTI meetings
  - Consults/collaborates with classroom teachers regarding differentiated instruction
5. Classroom teacher (Rotating member)
- Provides experience with and knowledge of student being discussed
  - Presents data/background information on student
  - Ensures next steps are documented and communicated with student and/or family (What Roles & Responsibilities Do MTSS/RTI Team Members Hold? section, paras. 2–6)

Researchers have also reported that procedures are vital to a successful MTSS implementation (Eagle et al., 2015). In one case study, Dulaney et al. (2013) explored the perceptions of superintendents involved in state-wide MTSS through a survey of the

southwest region of the United States, with 41 districts, including 662 elementary schools and 306 secondary schools; 66% of superintendents responded to the survey. From these, nine superintendents were selected for interviews. The study revealed the following ideas must be developed: (a) MTSS frameworks, (b) common language, (c) a district-wide culture of collaboration, and (d) the capacity of individuals and learning communities at every system level to ensure sustainability. The study also revealed that MTSS implementation in secondary schools requires closer examination and that more research on collaboration and professional learning communities is required in secondary schools.

Researchers have stressed that for the MTSS framework to be successful the process must include problem needs analysis, plan development, plan implementation, and plan evaluation (Eagle et al., 2015). One research example of this process focused on student attendance as the problem. Splett et al. (2018) examined multiple sources of data to explore attendance influences. Low interaction and connection between staff and student, lack of differentiation in teaching, limited family involvement, and low student motivation were identified as attendance influences. A plan to use the “check and connect” model to increase engagement, along with providing the student with a mentor to guide them with problem-solving and motivation strategies, was developed and implemented. Finally, the team collaboratively measured the outcomes of the intervention and evaluated its effectiveness (Splett et al., 2018).

Researchers have asserted that MTSS is a proactive system to identify and intervene when students struggle due to learning disabilities (Forman & Crystal, 2015; Hutchinson, 2018). They have further posited that tiered systems of support have led to improved academics, reduced avoidance behaviors, less special education referrals, and

improved graduation rates. Hattie (2015), in his research on effect size, ranked MTSS as sixth out of the 195 most influential variables to improve student achievement.

As noted in the literature, strong leadership is required to implement a successful MTSS (Rinck, 2018). This leadership is strengthened when leaders provide opportunities for distributed leadership, have the ability to communicate the value of implementation through data-driven approaches along with evidence, and celebrate teachers as change agents in moving the school on the path to success (Pollock et al., 2015).

To support the academic, emotional, and mental health needs of students, continuous improvement in the tiered-level collaborative support is required. This improvement requires cross-disciplinary collaboration, collective efficacy, teamwork, data-driven interventions, and evidence-based practices (Splett et al., 2018). MTSS requires many tiered-level support interventions because it involves a reculturing of the structures in schools for collaboration (Katz, 2018; Olivier & Huffman, 2016).

The next intervention is not a tiered-level approach, but the goal of this research is to examine approaches to help solve the issues that keep students from graduating high school. UDL focuses on supporting students in inclusive environments, and UDL is offered as a continuum of support strategy in Tier 1 and 2 interventions (Hewson & Hewson, 2022).

### ***Universal Design for Learning***

Research has supported the implementation of UDL from multiple areas of study including education, psychology, and neuroscience (Katz, 2018; Long, 2018). Studies have suggested that Lev Vygotsky and Jean Piaget developed the principles embedded in UDL instruction (Long, 2018). Piaget's (2005) theory of cognitive development stressed



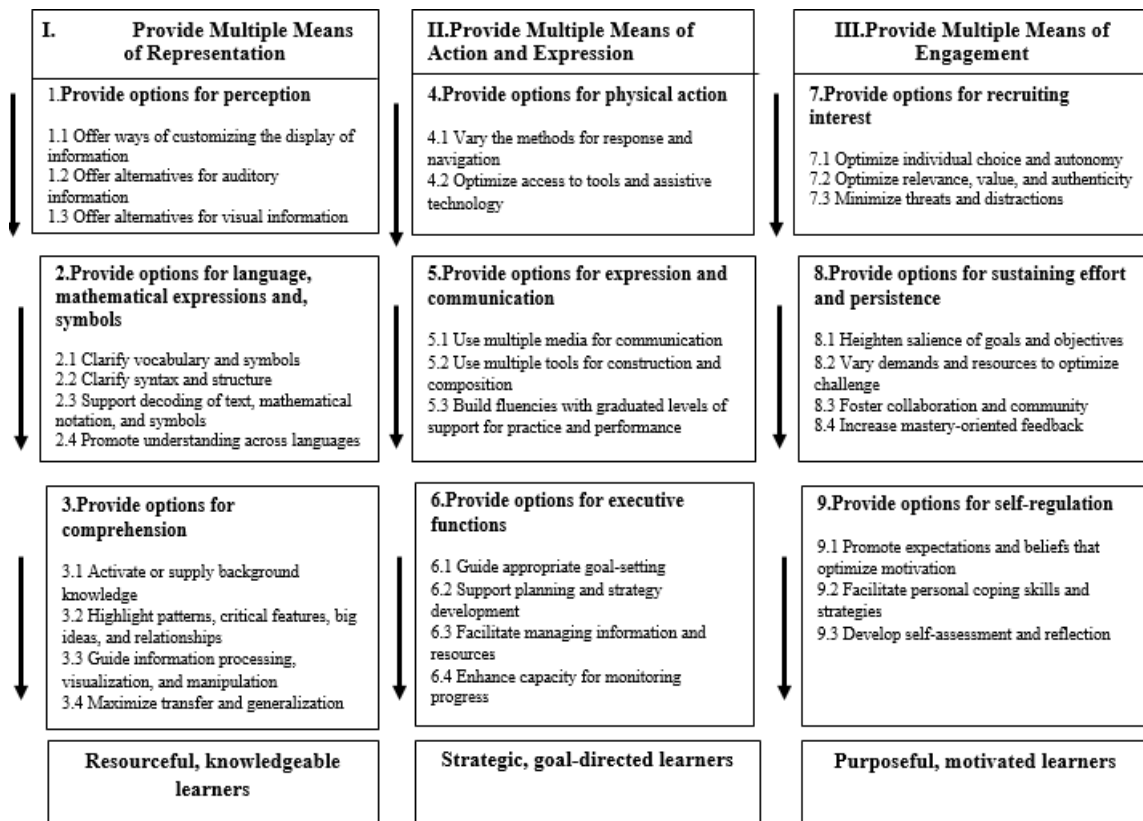
a balance or equilibrium; people endeavor to develop an understanding of how the world works to achieve cognitive balance. He emphasized the importance of genuine and concrete learning that requires both hands-on and social experiences. According to Piaget, an individual's social experience provides an opportunity to stay in equilibrium (when they have cognitive schemes like others) or change and build new schemes to regain equilibrium (when their cognitive schemes differ from others). UDL applications are meant to provide students with concrete experiences through multimodality—multiple means of representation that support understanding abstract concepts. Vygotsky (1987) developed a theory on social interactions called sociocultural theory, which stressed the impact of social exchanges and language, within a cultural context, on cognitive development. The zone of proximal development, a concept developed by Vygotsky, provided an underpinning for UDL applications. A student is considered in their zone of proximal development when they can approach a task that can be accomplished with the assistance of another (teacher, student, parent), thus creating the shared task belief.

When students are offered alternative means to express their learning and scaffolds to support their learning, growth can occur (Rose et al., 2006). UDL embraces the concept of mixed-ability classrooms to create many opportunities for students to learn from one another (Katz, 2012, 2013, 2018). Further, Story et al. (1998) asserted that environments in education should be designed to be usable to the greatest extent possible by people of all ages and abilities. The seven principles for universal design of products and environments are described by Connel et al. (1999):

1. **Equitable use:** The design is useful and marketable to people with diverse abilities. In education, this means the instruction is planned to involve all students.
2. **Flexibility in use:** The design accommodates a wide range of individual preferences and abilities, background knowledge, and attention span.
3. **Simple and intuitive use:** Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills, or current ability to concentrate.
4. **Perceptible information:** The design communicates necessary information effectively, regardless of environmental conditions or the user's sensory abilities. In education, for instance, visual, written, and kinesthetic models of instruction reach a range of students.
5. **Tolerance for error:** The design minimizes hazards and the adverse consequences of accidental or unintended actions. In education, this means both instruction and assessment recognize differences in student comprehension, pace of learning, and need for repetition of the instructions along with the actions.
6. **Low physical effort:** The design can be used efficiently and comfortably and with a minimum of fatigue. In education, the instructional design for presenting the curriculum reduces busy work that wastes time and mental energy and focuses on the big ideas.
7. **Size and space for approach and use:** Appropriate size and space is provided for approach, reach, manipulation, and use—regardless of the user's body size, posture, or mobility. (p. 35)

To thwart the messages of failure that students receive when they do not fit into inflexible systems, UDL provides accessible curriculum for diverse students with a wide range of abilities, ethnicities, language skills, and learning styles (Katz, 2012). Daoud and Quioco (2005) and Katz (2013) indicated that a high number of students who refuse to submit to inflexible school systems begin the slow process of dropping out. They suggested that learning environments that focus on 21st-century realities need to be created.

UDL is an example of a system of collaborative support that applies interventions and strategies to improve student outcomes. A study by Katz (2013) demonstrates how UDL can be considered a collaborative model to support students who are considered “at-risk” in traditional classrooms. Katz (2013) focused on a UDL implementation to promote inclusion and engagement for students with mixed abilities. This three-tiered model (the three-block model of UDL) of teaching involved social-emotional learning, inclusive practices with assessment for learning, and student autonomy in their learning. The study involved 631 students from Grades 1 to 12 attending 10 different schools. Data collected through surveys, interviews, and observations affirmed that students benefited from the interventions with increased social and academic engagement. One gap in research identified by Katz (2013) was whether engagement related to improved academic achievement. The original premise of UDL, as outlined in the Center for Applied Special Technology (2018) guidelines for implementation, is shown in Figure 5.

**Figure 5***Universal Design for Learning Guidelines*

*Note.* Adapted from *Universal Design for Learning Guidelines Version 2.2* [Graphic organizer] by Center for Applied Special Technology, 2018

([https://udlguidelines.cast.org/binaries/content/assets/udlguidelines/udlg-v2-](https://udlguidelines.cast.org/binaries/content/assets/udlguidelines/udlg-v2-2/udlg_graphicorganizer_v2-2_numbers-no.pdf)

[2/udlg\\_graphicorganizer\\_v2-2\\_numbers-no.pdf](https://udlguidelines.cast.org/binaries/content/assets/udlguidelines/udlg-v2-2/udlg_graphicorganizer_v2-2_numbers-no.pdf)). Copyright 2018 by CAST.

### **Collaborative Response**

CR owes a great deal to the RTI, UDL, and MTSS models. It has a framework that sets it apart by explicitly connecting the complex work of supporting all students through powerful and purposeful structures that lead to high levels of collective efficacy; staff collaborate intentionally to realize the vision of inclusion (Hewson & Hewson,

2022). (Hewson & Hewson, 2022). This is the number one factor for improving student achievement (Hattie et al., 2016, as cited in Donohoo & Katz, 2017). CR is distinguished by the intentional delineation between “tiering supports for students” and “tiering students.” A student can require Tier 2 supports for a period (e.g., after their dad commits suicide) but is not labeled a Tier 2 student long term. The new generation of response requires a move from special education, where the student is the target, to tiered-level responses as the focus. This shifts the responsibility or “blame” from the student to the system, which has a great impact on an individual who is failing to thrive in school (Hewson & Hewson, 2022; Shields, 2018).

According to Hewson and Hewson (2022), CR has seven distinctive features:

1. Collaboration is at the heart of all student examination and response, ensuring the *professional capital* present in schools is maximized.
2. *Layers of collaborative teams* are established, each with a different purpose and focused on a different level of support accessible for each learner at their time of need.
3. Value is placed on *varied perspectives and expertise* when examining the unique complex and diverse needs of students.
4. Capacity building is a natural by-product of collaborative discussions related to supporting students in the classroom, with an emphasis on the value of *distributive coaching* for staff members.
5. An intentional review of assessment data ensures that students are *flagged* for discussion, placing emphasis on collective professional judgment when examining students and the purposeful use of evidence to *inform* next steps.

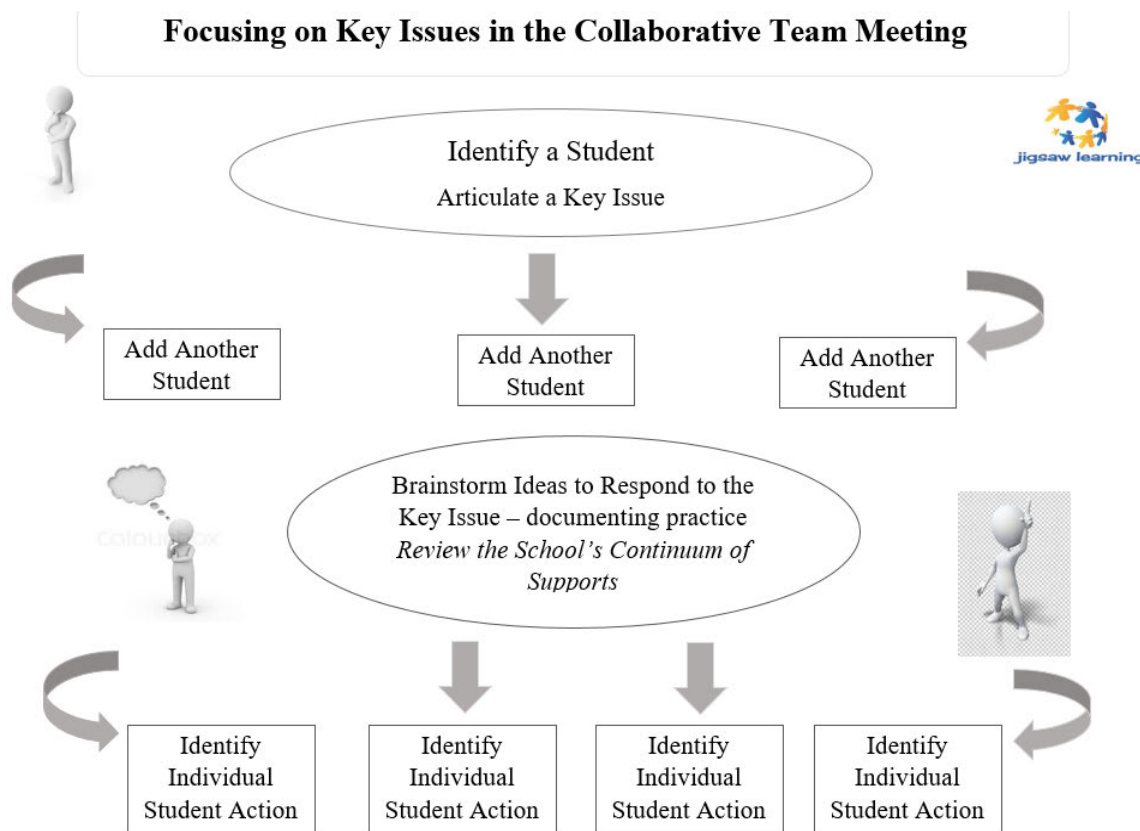
6. The development of a continuum of supports is a *fluid*, ever-changing organization of interventions, strategies and accommodations that explicitly emphasizes action taken in the classroom as the first locus of response for students.
7. *Supports are tiered*, not the students. In CR, support is provided and then other students who require the support are added. (pp. 32–33)

CR has a number of important structures, including case consultant meetings, SST meetings, CTM, and collaborative planning. The purpose of case consultant meetings is to focus on an individual student requiring intensive and responsive wrap-around supports, often involving specialists beyond the school. The frequency of the meeting is as needed, and the participants are dependent on the situation. They may include the administration, director of special education and director of inclusive education, director of curriculum and instruction, director of curriculum and instruction, reading specialist, external providers, counseling services, family school liaison, learning support teacher, teachers and educational assistant team, parents or guardians, Indigenous cultural advisor, medical professionals, social services, and police or resource officers.

SST meetings focus on students who require additional supports beyond the classroom level and are typically referred by the CTM. These meetings happen weekly or biweekly. The school-level participants include the administration, counseling services, Indigenous cultural advisor, reading specialist, director of special education, counseling services, director of curriculum and instruction, reading specialist, family school liaison, learning support teacher, and teachers.

CTMs focus on all students designated for the team (grade level, multigrade, advisory group, etc.), with support focused primarily on the classroom level through an examination of key issues. Meetings are every 3 to 5 weeks. Participants include the administration, counseling services, teachers, reading specialist, director of special education, family school liaison, director of curriculum and instruction, learning support teacher, and paraprofessionals (educational assistants). Figure 6 highlights the CTM structure, which shifts the focus from the student onto the system by articulating the key issues involved. Collaborative planning sessions are focused on classroom planning for teams.

Although CR (Hewson & Hewson, 2022) currently has no empirical studies to support its effectiveness, the other approaches to intervention have tenets that were mentioned as areas to address in future studies on tiered-level response research (Fuchs et al., 2010). The structures and procedures of the CR approach are meant to provide function to the team. Lencioni (2002) provided the five dysfunctions of a team: absence of trust, fear of conflict, lack of commitment, avoidance of accountability, and inattention to results. CR's system and approaches offer an antidote to team dysfunction by creating environments of trust, creating conditions for healthy conflict, increasing collective efficacy, holding staff accountable, and focusing on the data and results involved with every intervention (Hewson & Hewson, 2022).

**Figure 6***CTM Structure*

*Note.* Adapted with permission from *Collaborative Response: Three Foundational Components That Transform How We Respond to the Needs of Learners* (p. 121), by K. Hewson and L. Hewson, 2022, Corwin Press. Copyright 2022 by Corwin Press.

**Summary**

This literature review examined the variables that influence a student's ability to graduate from high school. The following variables were examined in the literature: socioeconomic status, being a minority learner, family dynamics, and ability factors. To understand the risk factors that lead to dropout, a theoretical framework was introduced as a foundation for understanding. Bronfenbrenner's (1979) Ecological Systems Model



shows how deficits in one of the systems integral to the development of the child can have impacts on school achievement. To close the gap on supports that work in mitigating the issue of high school noncompletion, research can help practitioners to identify and plan informed interventions across social, behavioral and education platforms. Bronfenbrenner's original theoretical model consisted of four ecological systems: microsystem, mesosystem, exosystem, and macrosystem. When a child's family, school, peer, and community systems have a disruption it creates dis-ease (Brendtro et al., 2019). Disturbance is a symptom of a disrupted ecosystem; therefore, children thrive when their needs are met and are at risk when needs go unmet (Brendtro et al., 2019).

The review then identified the supports that work for students who struggle in school and situated them in the conceptual framework of CR. Several empirical studies were explored that listed the following supports that work: leadership, high-quality teaching, inclusive practices, and collaborative responses to intervention.

### **Chapter 3: Methodology**

Grounded in Bronfenbrenner's (1979) Ecological Systems Model, the purpose of this instrumental study (Stake, 2013) was to document the degree to which SST members perceive that the processes and structures of the CR approach support students to graduate from high school. This study endeavored to answer the following research questions:

- RQ1:** What are the collaborative student supports available to students in rural communities to assist them in staying on track to obtain their high school diplomas?
- RQ2:** How do SSTs describe their implementation of CR as they engage in supporting at-risk students?
- RQ3:** What are the perceived outcomes that SST members observe from their work in keeping students on track to achieve their high school diploma?

This chapter outlines the methods and research design of the study. It includes the rationale for and description of the chosen research design and a description of the tools used to gather data, procedures involved in data gathering, participants, and the data analysis. The theoretical framework for the study and ethical considerations are also discussed.

#### **Rationale for Methodology**

This study employed an instrumental case study design to examine the implementation of CR. An instrumental case study illuminates the details of a particular case to gain insight into an issue (Stake, 2013). In this research, the case, or unit of study, was the CR and SST program in a rural school division in Alberta, Canada. The rationale

for using an instrumental case study for this research is linked to the purpose of the study: to explore the impact that CR teams and SSTs have on assisting students to graduate from high school. The participants guided me to understand the phenomenon of high school dropout and the complexity of SST approaches to address this phenomenon. I examined SST structures and gained insights into how these approaches impact high school graduation. Using an instrumental case study approach informed the practice surrounding the views of the individuals involved with SSTs (Stake & Schwandt, 2006). The data gathering tools allowed for the generation of theories about participant perspectives and obtained detailed information about a specific research site (Creswell et al., 2007). The data must be constructed, and the conceptual categories need to be built (Sipe, 2004).

I sought to capture the participants' experiences and understandings as they worked on the Tier 2 level of response of SST in assisting students to graduate from high school (Patton, 2002). The case was bounded by time and activity, which is described by Stake (2013) as necessary in case study research. This approach provided me with a method to examine a real-life phenomenon and gain insights into the event through the perceptions of the participants (Yin, 2009). The goal was to describe an intervention and the reality in which it occurred. The case study methodology, like an experiment, is generalizable to the theoretical propositions, and not to the populations or universes (Yin, 2009). The theories are derived from that data through multiple levels of sorting and coding. This study was intended to contribute to the understanding of the case of CR, and how SST members view its effectiveness in supporting students in graduating from high school.

According to Briggs et al. (2012), case studies are conducted within a localized boundary of space and time (i.e., a singularity) and must be carried out with “an ethic of respect” (p. 157) for the people involved. They are used to examine “*interesting* aspects of an educational activity, program, institution, system, or work of an individual” (Bassey, 2012, p. 157). Bassey instructs that sufficient data must be collected to (a) explore *significant* features of the case, (b) create *plausible* interpretations of what is found, (c) test for the trustworthiness of these interpretations, (d) construct a *worthwhile* argument or story, (e) relate the argument or story to any relevant research in the literature, (f) convey *convincingly* to an audience this argument or story, and (g) provide an audit trail by which other researchers may validate or challenge the findings or construct alternative arguments (p. 156).

Although the tiered-level supports involved in the CR can be linked to Bronfenbrenner’s (1979) Ecological Systems Model, it is important that participants on the CR teams and SSTs know which interventions to put into practice based on the approaches with the highest impact on student success. The focus on three high schools allowed valuable information to be gleaned pertaining to how SSTs impact students at risk of not graduating. Ascertaining which structures and procedures lend themselves to the successful implementation of CR at the high school level is of interest because research has shown that tiered-level interventions can be problematic in the high school system (Nilvius, 2020).

### **Context: The Collaborative Response**

In August 2015 and 2018 a new collaborative model was introduced to two Northern Alberta rural school divisions. The two divisions’ leadership teams, in

partnership with Jigsaw Learning and Kurtis Hewson (a cocreator of CR), began training in and implementation of the CR approach. Jigsaw learning is an online source for materials, networking, and finding information related to CR. Table 1 highlights one of the initial structures introduced to the leadership groups for team meetings.

**Table 1**

*Collaborative Team Meeting Role Overview*

Potential role	Description	Notes/considerations
Facilitator	Ensures the flow and direction of the meeting. Ensures that structures and processes established for the meeting are honored	Keep focused on determining action, rather than extended discussion Return attention to being data informed Promote inquiry through questioning and engagement of all team members
Recorder	Records student notes and actions in the appropriate note documents	Ensure that discussions have an attached action with assigned staff member and completion date Ensure that all team members receive a copy/have access to the team notes
Timekeeper	Ensures overall meeting efficiency and attendance to time	Keep the team consistent to determined time allocations (for celebrations, student discussion, end time, and other structures) Ensure awareness of end time for the meeting
Interrupter	Ensures conversations remain focused and directed toward action	Ensure that the role of interrupter is clearly understood by all team members When discussion is leading away from action, interrupt to say, “Yes, but what are we going to do?”
Cheerleader	Ensures that a positive tone is maintained for the meeting, with attention paid to student strengths and interests	Consider holding up a signal when talk deviates to negatively Ask questions to determine student strengths or interests when unsure

*Note.* Adapted from *Collaborative Response: Three Foundational Components That*

*Transform How We Respond to the Needs of Learners* (pp. 80–81), by K. Hewson and L.

Hewson, 2022, Corwin Press. Copyright 2022 by Corwin Press.

Since then, the division leadership teams have been working with schools and leaders to refine the continuum of support available to students across the divisions. The division leads on providing opportunities for training, implementation guidelines, and support to implement a consistent CR model across all schools. The leaders in CR implementation meet regularly in a central location to manage the barriers and celebrate the success stories of using CR. The division lead offer individual support to school teams, and review the implementation of CR by having Kurtis Hewson's team visit school sites, observe team meetings in person or via video recordings, and attend professional learning sessions to offer insights as well as respond to questions.

### **Setting**

This instrumental case study was conducted in three rural high schools in Alberta with diverse populations of Grade 10 to 12 learners (including ethnic minorities, immigrants, special needs students, learning disabled students, and international exchange students). The school populations range from 350 to 620 students (see Table 2). These sites are typical of the demographics of their northern communities and were the best-case selection because of their established SST structures. The two school divisions in which the study was conducted have been using the CR for 4 and 7 years, respectively. All schools in both divisions have been implementing the CR with different levels of success.

Selecting high schools with SST structures in place meant SST members, through their experience, would have substantive understandings of the factors in their process that support or impede student success. Having three high school SSTs allowed me to hear about the experiences of a variety of team members in different contexts. These

diverse views informed the generalizable implementation of CR across the school divisions. Since schools involved in this study are at varying stages of implementation, generalizations are offered for implementation based on the number of years the school has been using CR structures and procedures.

### **Participants**

Participants included staff (division and school level) involved in the CR implementation for the 2022–2023 school year at the three high schools involved in the study. The division lead of CR in each district contacted the schools to ensure their willingness to participate in the study. Participants were contacted to be a part of the survey portion of this study by me but only after the division leads on CR had conversations with the administration at each school. Once this initial conversation was had between the division CR lead and the principals of the three high schools, the leads asked me to email the survey link to the principals. Each principal then shared the survey link with their staff. Several staff members who were new to the school, and had no exposure to CR, were informed by their administration that they did not have to complete the survey. Staff were informed that they could elect to join or not join the study. The relationship with me, who was not in a position of authority over them, had no impact on their decision to participate or to opt out. Fifty-eight participants fully completed the online survey (see Table 2). Most survey participants were teachers, followed by administrators and district office personnel. The survey results on CR team processes and implementation levels informed division leaders about the district-wide readiness for CR implementation.

**Table 2***Survey Participants and School Demographics*

Group	School A	School B	School C
Survey participants	16	19	23
Student population	480	492	640

*Note.*  $N = 58$

For the one-to-one semistructured interviews, participants were selected using purposeful sampling (Patton, 2002) based on their proficiency with CR structures and processes as indicated in their survey responses. Suri (2011) described this sampling technique as a way of assisting the researcher in the decision-making process regarding a program's effectiveness. In choosing schools with established SST structures, I hoped to learn about CR implementation and success stories so the study could guide CR implementers to make logical decisions about training, scheduling, and support needed for the program's ability to support students to achieve high school success. One survey question asked participants to share their email address if they wanted to participate in a one-to-one interview. Eligible participants for the semistructured interviews were determined by their willingness to provide their email address as well as their indication that they were involved in SST structures and processes at their schools. Of the 80 prospective survey participants, 17 were willing to be interviewed and 11 were chosen for interviews.

I utilized purposeful sampling because of the need to understand the phenomenon from the vantage point of the team members working in high schools (Creswell et al., 2007). The participants for both the surveys and the interviews were from three high schools. All SST members in both divisions are on CR teams because they were hand



selected by their administrators or district office leads to intervene at a higher level to support students who struggle in school. Each of the three schools had five to seven SST members, who were thought to be innovators and leaders with a high level of skill and aptitude for helping struggling learners and additional training working with challenging students. The interview participants were active SST members and included administrators, counselors, teachers, coordinators, directors, and mental health support workers. The participants shared valuable information about the challenges that several students were facing and offered strategies to support the high-impact tiered-level responses to struggling learners.

### **Role of the Researcher**

I am in my 30th year as an educator, leader, teacher, and inclusive education director. I have a wealth of experience working with at-risk students and my knowledge of understanding what questions could be useful to ask helped me in obtaining important data from others working with challenging students. I have focused on at-risk youth for my entire 30-year career. I have worked in three school divisions and taught or coached at every grade level of the K–12 education structure in Alberta, Canada. The latter 20 years of my career have been spent in high school settings as an inclusive education coordinator, trainer, and principal. I have also worked for 2 years as a director in a central office with responsibility for 14 schools. My role was making the decisions about the continuum of supports offered to schools to help students. The following were key areas I supported: First Nations, Metis, and Inuit education; documentation and recordkeeping; violent threat and risk assessment training; inclusive education; knowledge and

employability instruction; Reclaiming Youth at Risk; literacy specialist and trainer, yoga instructor; and outreach education implementation.

For my entire career, I have been dedicated to finding ways to educate staff in supporting marginalized populations. I completed my master's degree in 2009 from the University of Alberta. I have provided training to staff over the course of my career on working with youth at risk, utilizing educational assistants in the classroom, implementing successful Knowledge and Employability programs, establishing inclusive practices and differentiation, using Remediation Plus Literacy, engaging in district-wide literacy planning, using experiential education with at-risk students, building teams in outreach environments, establishing SSTs, filling one's bucket to avoid compassion fatigue, and using the Reclaiming Youth at Risk International program.

I also recognize that qualitative methodology is a situated activity that locates the observer in the world (Denzin et al., 2006). It is from the vantage point of studying things in their natural settings that the researcher hopes to make sense of the central phenomenon in terms of coming to understand the meaning that people derive from their lived experiences. This method allows the researcher to blend their own observations with the self-reports provided by participants through interviews and life stories (Denzin et al., 2006). The processes undertaken for this research helped me to be apparent about my own assumptions, preconceptions, and biases. Triangulation of the data (literature review, surveys, and interviews) ensured that the data are credible and valid. I also ensured that ethical, confidential, and trustworthy procedures were followed.

## **Data Collection Procedures**

### ***Artifact***

Two district leads involved in this study provided their continuum of supports that reflects the support available for students across the four tiers of intervention (see Appendix F). To understand how teachers versus administrators rated their level of access to tiered supports within their contexts, Survey Question S1 asked participants to rate the degree to which the four tiers of collaborative support were available in their schools. Tier 1 includes assistive technology welcoming, formative assessment, and differentiation. Tier 2 includes accommodations, parent communication, formative assessment, and trained support in the classroom. Tier 3 includes educational assistant support, support block for targeted intervention, small group instruction, and tutoring. Tier 4 includes mental health, family school liaison worker, inclusive education director, Violence Threat Risk Assessment plans, speech-language pathologist, occupational therapist, physical therapist, and psychologist.

### ***Survey***

With approval from the University of Portland in August, 2022, as well as division approval, the first data collection method was a survey of staff involved in the CR implementation for the 2022–2023 school year. The survey, under the direction of the high school principals, was conducted at the three high schools on September 19, September 26, and October 6, 2022, respectively. To ensure the surveys were fully completed, I asked the administrators to inform their staff that they had one day to complete the survey. I did keep the surveys open for an extra day for each school and monitored survey activity for any work in progress prior to closing. The survey was

distributed electronically to 80 prospective participants, all of whom have been involved with CR since 2015. With 58 participants filling out the survey, the return rate was 73%.

The purpose of the survey was to explore where the members of collaborative teams rated their understanding of the procedures and structures involved in CR processes, understand their implementation journey, and gauge the perceived impact of the CR work. The survey instrument was an adapted version of the *Jigsaw Learning Reflecting on Collaborative Team Meetings* survey (Hewson & Hewson, 2022). See Appendices A and B for the original and adapted surveys. Demographic, rating scale, and short answer questions were added. The demographic questions asked about participants' role in the CR, years involved with CR, and the grade level the participants serve. The rating questions had participants identify what was important in the implementation of CR, and had them rate their perception of CR's effectiveness in improving key learning outcomes. The five short answer questions related to the participants' perceived effectiveness of their role in CR, their level of success with implementation, success stories with the model, and barriers to their work with CR. Participants also had the opportunity to explain their ratings of effectiveness, the importance of structures, supports that are important, and the barriers that impede CR function. The survey helped identify participants who showed experience with the structures involved in CR, as well as a deep understanding of CR approaches.

### ***One-to-One Semistructured Interviews***

The second data collection strategy involved 11 one-to-one semistructured interviews with members chosen through purposeful sampling (Creswell et al., 2007). Participants who agreed to be interviewed completed a written informed consent prior to

beginning the interview (see Appendix C). Creswell et al. (2007) stated, “One-to-one interviews are ideal for interviewing participants who are not hesitant to speak, are articulate, and who can share ideas comfortably” (p. 215). The SST members were well versed in the subject matter and included teachers, directors, consultants, counselors, and administrators who were chosen for the team because of their ability to work comfortably with every type of learner and colleague. Researchers using a qualitative methodology consider using stories as data (Merriam, 2002). In the present study, the stories of participants were shared in a semistructured interview format. In this narrative analysis of the lives of the participants, context is very important. Given that the research was conducted in three environments, with three sets of participants, this style of research was an adequate way to express the perspective of the teller, rather than to depict the typical views of society. This afforded the opportunity to uncover social assumptions that define the way participants interpret the central phenomenon being studied (Merriam, 2002). Additionally, interviews offered the opportunity to address all three research questions seeking to learn how the supports available and the effectiveness of the implementation of CR was impacting the goal of improving the important life outcome of high school graduation.

I assumed that the study would uncover that strong teaching is the key to having success with at-risk learners. The other primary assumption was that the leadership capabilities of the school’s layered teams, CTM or SST, would determine whether changes could be made to the teaching practices needed to support struggling learners. I was conscious to keep those assumptions out of the interview questions and responses during my time with SST members. Sticking to the interview questions and limiting the

comments helped me to keep my assumptions from influencing participant responses. A pilot interview with three teachers who were not part of the study was used to determine whether the questions would elicit thorough responses. This was very helpful in revising the questions to ensure that I could keep probes to a minimum.

I asked 11 questions relating to CR work that supported students to graduate from high school (see Appendix D). The questions consisted of three general questions, five specific questions, and ended with three questions on suggested improvements for CR. The questions on processes that support students were presented to each participant in the same order during each interview. The first three questions related to available supports, the participant's role within the SST, and the importance of the processes and structures utilized. I wanted to establish the available supports and the structures of collaboration in place and glean information on how SST members identified their impact on high school graduation. The next questions focused on family involvement in CR, impact of CR on key learning outcomes (graduation, attendance, belonging, and academic success), and the interaction and relationship between the layered teams in CR. The final section of the interview questions focused on barriers to CR implementation, accomplishments of CR implementation, and suggestions for improvement (see Appendix D). The interview followed a semistructured protocol (Creswell et al., 2007). Most questions focused on what factors, in the opinion of the respondent, most positively impact the learning of struggling students

Interviews took place on-site at the participating high schools and were recorded using a laptop, a smartphone, and a secondary smartphone as a back-up. Otter software was used to record the interview questions and responses with great accuracy. During the

interviews, I utilized probes (Creswell et al., 2007) to encourage more thorough responses from the participants as needed. Because of the short time, I chose to keep the study small, targeting experienced SST members, to ensure an in-depth understanding of the phenomenon. Merriam (2002) described this as occurring when “the emerging findings begin to feel saturated; that is, you begin to see or hear the same things over and over again, and no new information surfaces as you collect more data” (p. 26).

## **Data Analysis**

### *Artifact*

The continuum of support available for students across the four tiers of intervention (see Appendix F) was analyzed to reflect similarities and differences across the two districts involved in this study.

### *Survey*

Qualitative survey data analysis involved sorting the data from the demographic questions into their respective categories. The categories of job title, years of teaching experience, grade levels supported, and length of time using CR were recorded and compared for further reflection. Following the sort of the demographic data, the data from the general questions about CR or SST were organized in a table to help develop themes. Using a Microsoft Excel spreadsheet, data were analyzed based on common words used and listed factors that had a high impact on success. The open-ended question responses were sorted based on emerging themes. I used 11 x 17 in. paper to print and hand code the responses by making notes in the margins and using highlighters to match themes across responses from different participants. Software was used (WordArt.com and Microsoft Word count) to glean which words were used with the highest frequency.

Finally, Quirkos software was used to ensure that the hand coding was credible and double-check the data were properly analyzed. Participant responses were manually placed into emerging themes, and quotes could be accessed in the report generated for each survey open-ended question.

### ***One-to-One Interviews***

The one-to-one interviews were transcribed using Otter software and coded using Saldaña's (2021) descriptive coding method, which involved finding the main idea in the data. This descriptive coding process of constructing categories is highly inductive (Merriam & Tisdell, 2015). The first coding was completed manually on the typed transcription of the data. This was a way for me to become familiar with the data and is recommended by Saldaña for first-time researchers. I printed the transcripts on 11 x 17 in. paper to allow for ample room to highlight, make notes, and draw arrows to ideas that were connected. Each interviewee's transcription had a large space left for detailed notes at the end of the document.

First cycle coding was utilized by creating a list of nvivo codes that aligned with the literature review, in orientation with the conceptual framework of the CR tiered-level interventions (Hewson & Hewson, 2022) and Bronfenbrenner's (1979) Ecological Systems Model. The first cycle coding followed a combination of deductive and inductive analysis. At the beginning, bits and pieces of data were placed into categories. As the data were checked multiple times, some categories were dropped and others stayed strong. At this point when saturation was reached, and nothing new was coming forward, the research shifted into the deductive mode (Merriam & Tisdell, 2015). The codes were applied throughout the reading of the one-to-one interview transcripts.



Merriam (1998) stated that analysis of the codes reflects the constructs that structured the study in the first place (p. 48). First cycle coding was also informed by the survey data and the literature review (Saldaña, 2021). I used a Microsoft Excel document to list the codes and place comments and themes under the aligned code. The list of codes allowed me to track which participant responses matched codes and provided a means to capture comments that did not fit any codes.

I completed the coding independently, and then employed Quirkos for another level of coding. In the hand analysis, deductive coding was employed, whereas in using Quirkos, inductive coding was utilized. Saldaña (2021) recommended this coding tool as a means for beginning researchers to ensure that they have honored the voices of their participants.

Second cycle coding was utilized to develop categorical, thematic, and theoretical organization from the array of first cycle codes (Saldaña, 2021). Second cycle coding allows the data sets to be compared, then refined into subcategories. Themes were derived from ongoing analysis in relation to the research questions, and the categories were labeled and assessed for a fit with the overarching themes. See Appendix E for the codes and themes.

Saldaña (2016) posited that the next step in coding is to develop theories, concepts, or assertions, and provided a grocery store analogy to make sense of the full coding process:

1. First cycle coding: Creating categories. Sorting frozen, fresh, and meat products.
2. Second cycle coding: Identifying concepts. Preparing to put the groceries in their storage places in the home: refrigerator (concept 1), freezer (concept 2) and

- pantry (concept 3).
3. Key assertion/theory: Making that ‘special dish’. Only taking out what is needed (essentials of the data) out of everything that was bought (analyzed) to cook it (write it up). (p. 235)

### **Trustworthiness**

Trustworthiness for this study was established through credibility, dependability, confirmability, and transferability.

### ***Credibility***

To ensure credibility, I ensured that the data were triangulated. This was done by exploring the research questions from different perspectives. Looking at the different roles of those serving in CR was a way of triangulating the data. The survey data, the interviews with the SST members in three different schools, the literature review, and division documents were all analyzed to increase validity of the study.

CR is a tiered approach to supporting students along a continuum of supports. There are no empirical studies to reference on CR’s effectiveness; therefore, as a way to triangulate the interview and survey analyses, an expert audit review (Patton, 2002) was undertaken on December 23, 2022. The CR expert reviewed some of the major findings about tiered supports, barriers to implementation, and structural challenges involved in high school. These points were kept at the forefront of the conversation, as major research findings were shared with the expert. The review lasted 53.44 minutes and was recorded using Otter software. The Otter transcript was imported to Quirkos and first and second cycle coding were conducted. The data from this review was were not used in the findings. The review was meant only to glean if the views of the participants related to

the literature on CR processes, and to the expert's view of its CR implementation in high schools.

### ***Dependability***

To ensure dependability in this study a clear research process was provided. I kept the research questions at the forefront of all data collection and data analysis processes. Tables, a journal, transcripts, field notes, spreadsheets, artifacts, and graphic organizers were used to organize findings, themes, and codes. This helped me make decisions about what to include and exclude from the research.

### ***Confirmability***

Confirmability was established throughout the study by having clearly stated research questions, detailed explanations of the structures and processes involved, precise explanations of the methodology of choice, and a transparent explanation of the decisions made based on the conceptual and theoretical underpinnings of the study.

### ***Transferability***

Transferability was enriched by the details offered by participants in the one-to-one interviews. The views of SST members provided detailed, in-depth descriptions of the case being studied. I used the same questions in the same order during each interview. Most of the questions focused on what structures and processes of CR most positively impact the learning for struggling learners. Table 3 outlines the research strategy and my approach to ensure trustworthiness for this study.

**Table 3***Research Strategy*

Strategy	Description	Researcher Approach
Triangulation	Using multiple investigators, sources of data, or data collection methods to confirm emerging findings	I used multiple sources of interview data from three sites, measuring the same case within their contexts, helping to confirm the validity of the emerging findings.
Member checks/ respondent validation	Taking tentative interpretations/findings back to the people from whom they were derived and asking if they are plausible	I used field notes and observations during the interview process. I emailed the transcribed documents to each participant and asked if the documents captured their views. The opportunity to add information was also afforded to the participants during this process. Creswell et al. (2007) refers to this process as member checking.
Adequate engagement in data collection	Spending adequate time collecting data such that the data become saturated; this may involve seeing discrepant or negative cases	Once I had affirmation of saturation, a hand analysis was completed of the qualitative data, meaning that the data were read, marked by hand, and divided into parts (Creswell et al., 2007). This allowed me to see themes in the data; despite being a labor-intensive process; it gave a hands-on feel without the intrusion of a machine. Once this analysis was sorted, a coding process was used to make sense of the data. During this process, specific data were selected and disregarded as they related to the themes. The data were analyzed with constant comparison analysis (Leech & Onwuegbuzie, 2011) a process whereby the entire set of data was read and then chunked into smaller meaningful parts. Each chunk was labeled with a title or code. Although constant comparison analysis has been used for research involving several interviews, it has recently been used for single round interviews (Creswell et al., 2007).
Researcher's position or reflexivity	Engaging in critical self-reflection regarding assumptions, worldview,	I explicitly identified their assumptions at the beginning of the research process, to keep these assumptions out of the

Strategy	Description	Researcher Approach
	biases, theoretical orientation, and relationship to the study that may affect the investigation	interview questions and responses during time spent with participants. Further, during the interview process, I adhered to the interview questions and limited their comments. Moreover, the use of a pilot interview was used to gauge whether the questions would elicit thorough responses, thus ensuring that probes would be minimal.
Peer review/ Examination	Having discussions with colleagues regarding the process of study, the congruency of emerging findings with the raw data, and tentative interpretations	Professional Learning Days provided the platform to explore the data and allow team members (school colleagues, and dissertation peers) to share the data.
Audit trail	Providing a detailed account of the methods, procedures, and decision points in carrying out the study	Audit data were documented using a research journal, spreadsheets, and table of research questions and data collected relating to each research question.
Rich, thick descriptions	Providing enough description to contextualize the study such that readers will be able to determine the extent to which their situations match the research context, and, hence, whether findings can be transferred	During the semistructured interviews, respondents were encouraged to expand on narrative descriptions of their experiences and to connect them to the experiences of the at-risk youth they serve. Probes were utilized (Creswell et al., 2007) to elicit more thorough responses from the participants, as needed.
Maximum variation	Purposefully seeking variation or diversity in sample selection to allow for a greater range of application of the findings by consumers of the research	Members of three school's SSTs provided diversity in the sample selection. The teams have counselors, teachers, support staff, inclusive education coordinators, equity coordinators, and mental health specialists.

*Note.* CR = Collaborative Response. SST = Student Support Team. Adapted from

*Qualitative Research: A Guide to Design and Implementation* (p. 259), by S. B. Merriam and E. J. Tisdell, John Wiley & Sons. Copyright 2016 by John Wiley & Sons Inc.

## **Ethical Considerations**

Approval for this study was requested from the Institutional Review Board of the University of Portland and from the school divisions in which the study was carried out.

### ***Confidentiality***

I protected the participants' identities by using pseudonyms to ensure that no response could be linked to them and potentially cause them harm. Their anonymity was deemed essential to ensure responses that reflected their experiences using the CR structures. Because the district was interested in how the CR intervention had impacted schools and student success, it was important to recognize and inform participants that they had the freedom to be completely honest or to opt out of participation.

### ***Informed Consent***

Study participation was completely voluntary. The purpose and procedures for the study were provided to participants in a clear information sheet. There was an opportunity for prospective participants to ask clarifying questions about participation in the study. Participants were provided a letter of consent, which outlined the survey time frame and intent. Prior to the survey being administered, participants needed to agree to participate in it. Participants for the one-to-one interviews were selected based on survey data that identified their willingness to be interviewed (by sharing their email) and their CR implementation readiness. The participants signed written letters of consent (see Appendix C) where a preamble about the process was provided, time for the interview was estimated, and the intent was provided. Survey and interview participants were able to withdraw from the study at any point.

Recordings of the one-to-one interviews were stored on password-protected devices. Written notes were kept in a locked file in my home office desk. All related research on my computer was secured by having a password-protected computer. Identifying names or attributes were omitted from the study and pseudonyms were employed to protect participants' identities.

### ***Limitations***

To make the research manageable, I chose to conduct the study in three high school settings that only included Grade 10 to 12 students. This study was further limited, as I chose to interview 11 staff members and collected data over a 6-week period. This study is only a snapshot of CR, early in a school year.

Case study research can be viewed as a limitation in that the results are not easy to generalize to other settings or circumstances (Stake, 2010). It is hoped that this case study research will provide high school practitioners with valuable information about tiered-level responses to student struggle. This case study may offer direction to system leaders developing continuum of support models in their settings.

Another limitation of this study is that the SST members who were interviewed may have had different experiences due to levels of training, staff turnover, leadership in the school, contextual factors that impact the supports available to them, and number of years CR has been implemented in their schools.

### **Summary**

Grounded in Bronfenbrenner's (1979) Ecological Systems Model, the purpose of this instrumental study (Stake, 2013) was to discover how SSTs impact the learning of at-risk learners and to outline how CTMs and SSTs impact graduation rates for high school

students. In this chapter, the data from survey and interview responses were evaluated, the case being studied was outlined, research methodology was shared, and the rationale for the study was presented. The methodology included investigation of the case, in two school divisions implementing CR, and what impact SST members perceived CR to have on high school graduation. One survey was utilized, and individuals were selected to be a part of one-to-one semistructured interviews. This chapter also included a description of the setting, participants, role of the researcher, and methods of data collection and analysis. Finally, ethical considerations, limitations, and assumptions were shared.



## Chapter 4: Findings

Grounded in Bronfenbrenner's (1979) Ecological Systems Model, this instrumental case study was designed to investigate how CR and SSTs are being implemented and the degree to which those who are implementing CR see their work contributing to supporting students in the areas of attendance, belonging, academics, and high school graduation. The purpose of this instrumental study (Stake, 2013) was to document the degree to which SST members perceive that the processes and structures of the CR approach support students to graduate from high school. This study endeavored to answer the following research questions:

**RQ1:** What are the collaborative student supports available to students in rural communities to assist them in staying on track to obtain their high school diplomas?

**RQ2:** How do SSTs describe their implementation of CR as they engage in supporting at-risk students?

**RQ3:** What are the perceived outcomes that SST members observe from their work in keeping students on track to achieve their high school diploma?

After documenting demographic/personal background information of the participants (role, years with CR, grade level served), this chapter is organized into four parts linked to the three research questions: supports available to students in rural communities to assist them in staying on track to obtain their high school diplomas (RQ1), implementation of CR as they engage in supporting at-risk youth (RQ2), perceived outcomes (including barriers) that SST members observe from their work in

keeping students on track to achieve their high school diploma (RQ3), and will bring together survey and interview data to respond to the research questions.

### **Participant Characteristics**

The survey results provided background information on the participants, which included staff across two school districts and three schools in Northern Alberta. Survey participants included counselors, mental health practitioners, directors, teachers, and administrators. Table 4 describes the demographic characteristics of the participants, including their role in the district and years of experience with CR.

**Table 4**

*Survey Participants' Role and Years of Experience With CR*

Role	<i>N</i>	% of sample	Years of experience with CR
Administrators	9	15	5–10 years
Teachers	42	72	1–5 years
District office staff	8	13	5–10 years

*Note.* *N* = 58. CR = Collaborative Response. District office staff includes counselors, directors, and CR leads.

The breakdown of participant roles across all three schools was close to the same, with two to four administrators, two counselors, and 11 to 19 teachers participating from each school. As seen in Table 4, 72% of survey participants were teachers and 15% of participants were administrators. Due to the tiered structure of the model, the role of the participant is relevant to understanding the participant perceptions of CR processes, supports, and effectiveness and it is important to analyze consistencies and differences among participants in each role.

Table 5 outlines which grade levels the survey participants serve. Because the research focuses on how CR influences important educational outcomes, including graduation, it is important to know which participants serve a high school population. Rural schools often have K–12 and other configurations where primary and secondary grades are in the same building. Although some participants stated that they primarily served K–6 or 7–9, they elaborated in the short answer section of the survey that they also have roles in supporting high school students. One school had two staff members from the primary grade levels that had high school SST roles due to the grade configurations in their schools.

**Table 5**

*Grade Level Served by Survey Participants*

Grade level	<i>N</i>	%
K–6	2	3
7–9	2	4
7–12	16	28
10–12	30	52
Other	6	10
Prefer not to answer/Left blank	2	3

*Note.* *N* = 58. K–9 teachers also served on Student Support Teams that support high school learners.

Table 6 outlines the years of experience of the participants. The interesting point about years of experience with CR implementation pertains to mastery of the processes and structures, and knowledge of the change process. Building the trust required in the

CR process, building the capacity of others to lead meetings, building the continuum of supports, and tiering the supports needed for students along the four tiers of intervention takes a considerable amount of time.

**Table 6**

*Survey Participants' Years of Experience With CR*

Years of Experience With CR	<i>n</i>	%
1–5	41	71
6–10	14	24
11–15	1	2
15–20	0	0
21+	0	0
Prefer not to answer/Left blank	2	3

*Note.* *N* = 58.

It was important to gather information from people who were well versed in CR process, and therefore important to know which participants had enough exposure to CR to contribute to the findings. Formal leaders in the study indicated that several of their staff were new to their division this year. The survey was given early in the school year, and this made it difficult for newly hired staff to respond to the survey because they did not know what the terms meant and had not yet been involved in any CR meetings. As supported in the literature (Schaefer et al., 2012). It can be difficult to attract and retain teachers to rural school divisions. Often, in my experience as a principal and district lead, teachers in rural settings will stay long enough to get their certification, and then move on to larger urban districts. In Alberta, new teachers go through a process of evaluations in order to receive a permanent teaching certificate after they have proven they have the

competencies outlined in the teaching quality standard established for the province. In Alberta, teachers can teach on probationary contracts until they prove their competency to achieve their permanent certification. This process of certification typically takes 2 to 3 years. The staffing challenge facing rural schools is beyond the scope of this study; however, its impact is important for CR implementers to anticipate given the complexity of the approach and the skills required for CR. This was asserted in the research into why approximately 40% of beginning teachers leave teaching within the first 5 years and 25% of graduates from Alberta postsecondary institutions did not assume teaching positions (Schaefer et al., 2012). The 41 participants with 1–5 years of experience with CR were spread equally across the three schools. In regard to participants with 6–10 years of experience, none came from School A, five came from School B, and nine came from School C. School A was the only school with a participant reporting 11–15 years of experience. It was important to gather information from people who were well versed in the CR process, and therefore important to know which participants had enough exposure to CR to contribute to the findings.

In CR there are four tiers to support student needs. Tier 1 includes universal support, where the classroom teacher is responsible for delivery. Tier 2 includes targeted support, and is offered by classroom teachers. Tier 3 includes school support for targeted intervention, small group instruction, and is supported by professionals other than the classroom teacher. Tier 4 includes intensive supports and is supported by outside resources and agencies.

Table 7 describes the roles of the interview participants. Of the 17 respondents who volunteered to be interviewed, 11 participants were selected based on role and

experience to ensure a wide range of perspectives for each school involved. Interview participants included counselors, mental health practitioners, directors or division office CR leads, teachers, and administrators.

**Table 7**

*Interview Participant Demographics*

Role	<i>n</i>	% of sample
Administrators	4	36
Teachers	3	27
District office staff	4	37

*Note.*  $N = 11$ .

The demographic information about participants indicates a balanced view on the supports required for the CR approach, as different roles support different tiers of support for students.

**Available Student Supports (RQ1)**

The first research question to address was “What are the collaborative student supports available to students in rural communities to assist them in staying on track to obtain their high school diplomas?” Collaborative supports were identified through survey and interview questions. Survey Questions S1–S3 pertain to supports available to participants across the four tiers of intervention, their access to those supports, and what support they rated as most valuable. Descriptive statistics, including the mean, median, and standard deviation, were calculated for overall scores relating to data from S1–S3. Open-ended Question S4, which asked participants to explain their ratings of supports and was coded inductively. Four interview questions that pertained to supports: Question

1 asked participants to describe their role in CR, Question 2 asked about the structures and process, Question 9 asked about challenges with the SST and what could improve team function, and Question 11 asked about accomplishments and next steps in CR implementation. Interview participants offered information about student supports throughout their responses. Table 8 provides a summary of the themes and categories that were inductively identified from qualitative data in response to the first research question (see Appendix E).

**Table 8**

*Themes and Categories for Research Question 1*

Theme	Categories
Available Supports	Tier 1–Tier 4
Access to Supports	Mental health support Career counselor Learning coaches Educational assistants Student assistants Mental health training

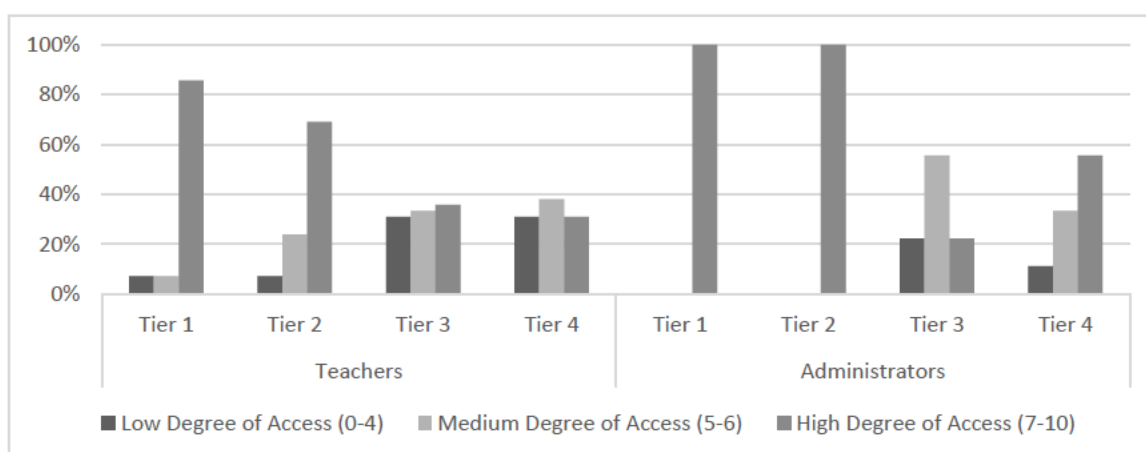
*Note.* CR = Collaborative Response. Codes and themes can be viewed in Appendix E.

**Artifact and Quantitative Survey Findings.** In two district leads involved in this study provided their continuum of supports that reflects the support available for students across the four tiers of intervention (see Appendix F). To understand how teachers versus administrators rated their level of access to tiered supports within their contexts, Survey Question S1 asked participants to rate the degree to which the four tiers of collaborative support were available in their schools. Tier 1 includes assistive technology welcoming, formative assessment, and differentiation. Tier 2 includes accommodations, parent communication, formative assessment, and trained support in the classroom. Tier 3

includes educational assistant support, support block for targeted intervention, small group instruction, and tutoring. Tier 4 includes mental health, family school liaison worker, inclusive education director, Violence Threat Risk Assessment plans, speech-language pathologist, occupational therapist, physical therapist, and psychologist. Figure 7 shows how teachers and administrators (including district office employees) perceived their access to supports.

**Figure 7**

*Availability of Tiered Supports: Teachers vs. Administrators (%)*



As Figure 7 shows, 86% of teachers rate the availability of Tier 1 supports as high. For Tier 2 supports, 69% of teachers rated their availability as high, 24% as medium, and 7% as low. Teachers are responsible for Tier 1 and Tier 2 levels of support. For Tier 3 supports, 36% of teachers rated the availability as high, 33% as medium, and 31% as low. For Tier 4 supports, 31% of teachers rated the availability as high, 38% as medium, and 31% as low. All administrators rated Tier 1 and 2 supports as fully available at 100%. For Tier 3 supports, 22% of administrators rated the availability as high, 56% as



medium, and 22% as low. Tier 3 supports are typically obtained by administration or district office. Finally, for Tier 4 interventions, 56% of administrators rated the availability as high, 33% as medium, and 11% as low. Tier 4 support is led by administrators, district office staff, and specialty support. These results indicate that those who serve or support the level in the tiered intervention rate the availability of the support as higher. Teachers rated Tier 1 and 2 much higher than Tier 3 and Tier 4. Administrators rated Tier 1 and 2 at 100% available, and perceived higher rates of availability, due to their involvement in Tier 3 and Tier 4.

### ***Access to Supports***

The supports available to participants required further exploration into how these available supports are being accessed across two districts, and three schools.

**Quantitative Survey Findings.** The support available along the four tiers of intervention varied across schools due to several variables and specific school contexts. Each division's continuum of support showed what support is available for students to access. To better understand how the participants perceived the ability to access support was necessary to understand not only what supports are available, but how well they can be accessed. Table 9 shows the tiered supports and the levels of access (low to high) that participants stated they had.

**Table 9***Survey Results of Tiered Supports Available for Students to Access*

Tiered Supports	<i>n</i>	<i>M</i>	<i>SD</i>	Median	Low degree of access (%)	Medium degree of access (%)	High degree of access (%)
Tier 1: Universal classroom	57	8.23	2.16	9	9	5	81
Tier 2: Differentiated classroom	56	7.59	1.83	8	7	20	73
Tier 3: Targeted supports	56	5.66	2.39	6	29	36	35
Tier 4: Intensive supports	56	5.77	2.28	6	29	36	35

*Note.*  $N = 57$ . Scores could range from 0 = *minimal degree of access* to 10 = *high degree of access*. Scores of 0–4 are categorized as low degree of access, scores of 5–6 are categorized as average degree of access, and scores of 7–10 are categorized as high degree of access. Blank responses are not reflected in the percentage data.

On a scale from 0 to 10, participants identified supports at Tier 1 ( $M = 8.23$ ,  $SD = 2.16$ ) and Tier 2 ( $M = 7.59$ ,  $SD = 1.83$ ) as easier to access. Of the 57 participants, 81% and 73% indicated a high degree of access to Tier 1 and Tier 2, respectively. Tier 3 and 4 supports are harder to access, with only 35% of participants indicating a high degree of access for each. For Tier 4 interventions, 29% of participants indicated a low degree of access, 36% a medium degree of access, and 35% a high degree of access. Most participants (41) were teachers, who focus primarily on Tier 1 and 2 supports, so these response levels reflect their level of access.

Figure 8 shows the participants' degree of access to the four tiers of support with the data disaggregated by school. At School A, 68% of participants indicated a high degree of access to Tier 1 ( $M = 7.07$ ,  $SD = 2.85$ ), 53% indicated a high degree of access to Tier 2 ( $M = 6.73$ ,  $SD = 2.20$ ), 40% indicated a high degree of access to Tier 3 ( $M = 5.27$ ,  $SD = 2.56$ ), and 13% indicated a high degree of access to Tier 4 ( $M = 5.0$ ,  $SD = 1.99$ ). At School B, 95% of participants indicated a high degree of access to Tier 1 ( $M = 8.53$ ,  $SD = 2.21$ ), 89% indicated a high degree of access to Tier 2 ( $M = 8.0$ ,  $SD = 1.70$ ), 33% indicated a high degree of access to Tier 3 ( $M = 5.83$ ,  $SD = 1.92$ ), and 44% indicated a high degree of access to Tier 4 ( $M = 6.22$ ,  $SD = 2.64$ ). At School C, 91% of participants indicated a high degree of access to Tier 1 ( $M = 8.74$ ,  $SD = 1.65$ ), 74% indicated a high degree of access to Tier 2 ( $M = 7.83$ ,  $SD = 1.93$ ), 35% indicated a high degree of access to Tier 3 ( $M = 5.78$ ,  $SD = 2.73$ ), and 44% indicated a high degree of access to Tier 4 ( $M = 5.91$ ,  $SD = 2.22$ ). The analysis of these statistics links to the number of participants who are teachers. Since 41 participants are teachers, it would make sense that they would have a higher degree of access to Tier 1 and Tier 2 supports.

## Figure 8

### *Survey Participants' Access to Tiered Supports*

	Tier 1 S1 Supports access_1			Tier 2 S1 Supports access_2			Tier 3 S1 Supports access_3			Tier 4 S1 Supports access_4		
	School A	School B	School C	School A	School B	School C	School A	School B	School C	School A	School B	School C
	<i>M</i>	7.07	8.53	8.74	6.73	8.00	7.83	5.27	5.83	5.78	5.00	6.22
<i>SD</i>	2.85	2.21	1.65	2.20	1.70	1.93	2.56	1.92	2.73	1.99	2.64	2.22
Median	8	9	9	6.5	8	8	5	5.5	6	5	6	6

Survey Question S2 asked participants to indicate to what degree their students have access to the four tiers of support. Table 10 shows the degree of access for each of the three schools involved in this study. The table further indicates the number of participants that responded and the percentage rate of responses per category of access.

**Table 10**

*Survey Participants' Degree of Access to Tiered Supports for Students*

Degree of access	Tier 1 <i>n</i> (%)			Tier 2 <i>n</i> (%)			Tier 3 <i>n</i> (%)			Tier 4 <i>n</i> (%)		
	School			School			School			School		
	A	B	C	A	B	C	A	B	C	A	B	C
Low	3 (20)	1 (5)	1 (4)	1 (7)	1 (6)	2 (9)	4 (27)	4 (22)	8 (35)	4 (27)	6 (33)	6 (26)
Medium	2 (13)	0 (0)	1 (4)	6 (40)	1 (6)	4 (17)	5 (33)	8 (44)	7 (30)	9 (60)	4 (22)	7 (30)
High	10 (68)	18 (95)	21 (92)	8 (53)	16 (89)	17 (74)	6 (40)	6 (33)	8 (35)	2 (13)	8 (44)	10 (44)

*Note.*  $N = 16$  for School A;  $N = 19$  for School B;  $N = 23$  for School C. Where a survey response was left blank, the number of responses will not add up to the school's total  $n$  value. The blanks are not recorded in the percentage.

Table 10 shows that for Tier 1 support, 95% of participants at School B indicated a high degree of access, while 92% of participants at School C and 68% of participants at School A indicated the same. School B, had 0% of participants indicate a medium degree of access to Tier 1, while 13% from School A and 4% from School C indicated this level of access. With low degree of access, School A had 20% of participants, while School B had 5%, and School C 4% indicated the same. In relation to Tier 2 supports, a high degree of access was stated by 53% of participants in School A, while 89% for School C, and 74% from School C indicated the same. A medium degree of access for School A

was indicated by 40% of participants, while School B 6% and School C 17% indicated this level of access. Finally, a low degree of access to Tier 2 was indicated by School A at 7%, School B at 6%, and School C at 9%. For Tier 3, participants rated their degree of access to be high at 33%, 35% and 13% respectively for School A, B, and C. They rated their access at a medium level with School A 33% School B, 44%, and School C, 30%. A low degree of access was indicated by 27%, 22%, and 35% of participants in School A, B, and C respectively. Finally, participants indicated that in Tier 4 they had a high degree of access, with School A at 13%, School B at 44% and School C at 44%. Medium access was indicated to be 60%, 22%, and 30% for School A, B, and C respectively. A low degree of access was indicated by School A to be 27%, School B at 33%, and School C at 26%. Teachers made up the majority of participants in this study (72%), and the first two tiers and the first two tiers are within a teacher's direct control. The higher the level of perceived access to Tier 1 and Tier 2 can be attributed to this reality. Tiers 3 and 4 are accessed from outside of the classroom and are not always perceived to be directly available to teachers.

Participants were asked to rate their satisfaction with access to Tier 4 supports, Table 11 shows the number of responses for each level of effectiveness, along with a percentage.

**Table 11***Degree of Survey Participant Satisfaction With Access to Tier 4 Supports*

Effectiveness of access to Tier 4 supports	<i>n</i>	%
Not at all	2	3
Very little	10	16
To some degree	27	44
Quite a bit	19	31
A great deal	3	5

*Note.*  $N = 57$ . Scores of “a great deal” and “quite a bit” can be deemed to indicate a high level of access to support. “To some degree” equates to a medium level of access, and “very little” and “not at all” indicate a low level of access.

**Qualitative Survey Findings.** Survey respondents stated that they lacked access to support in key areas for CR implementation, mainly in the educational assistant and mental health areas. One administrator survey respondent (R43) captured all four tiers in this elaboration of tiered support access. As with many participants (15 related interview responses), they allude to the strain on finances, resources, and supports that are available in rural school settings. I am presenting this quote in length because this response captured how all of the tiers are accessed and why there are complexities with access for rural schools:

EA [educational assistant] support is an important resource for struggling students, particularly those who have secondary education knowledge. Finances don’t allow us to support students with OT/PT/SLP [occupational therapy/physical therapy/speech-language pathology] apart from central program (special education) students. Educational psychological assessments are very limited. WIAT [Wechsler Individual Achievement Test] testing now must be done in-house by teachers. The Learning Coach role is so important, and this has

been taken away. We are spread very thin. Tier 1 support is universal and available to all students. Tier 3—specifically EA support is quite dependent upon availability. I believe that more students could benefit from more EAs in our classrooms. Additionally, our school does offer a targeted student support block, students are often self-selecting to attend this. In addition, this is offered when other courses are being run and students would have to miss a class to be able to take advantage of this. Tier 4—students do have access to intensive support at our school, however, there is an increased demand, particularly for Mental Health and counseling; particularly over the last couple years as our students recover/deal with the pandemic and the effects it has had on their lives.

This response shows the importance of the involvement and access to key stakeholders in the CR meetings. The support available for access within the tiered interventions for students who struggle (with 20 instances of this code assigned in the short answer survey section, and 11 codes in one-to-one interviews). The analysis of the codes showed mental health training and educational assistant support to be extremely important to participants.

Teacher participant (R38) discussed the strain that rural schools feel with a lack of resources, finances, and support (15 related interview responses). They felt very strongly that educational assistant and mental health support in schools is needed:

All these supports are present for access, but they're not funded well so EA [educational assistant] support is not consistent for all students who need it. Tier 4 interventions are available, but more and more students are needing support from

school counsellors, as well as mental health support. There are not enough Liaison Workers to support the demand. They are stretched too thin.

Many short answer explanations of ratings or general comments about Tier 4 interventions mentioned the need for more mental health training (12 survey related comments, and 11 interview related responses) for teachers because the amount of support from mental health workers in schools cannot possibly keep up with the needs.

One teacher participant (R42) revealed how important they felt mental health support was for students:

In Tier 4 - students do have access to intensive support at our school; however, there is an increased demand, particularly for Mental Health and FSLWs [family school liaison workers]; particularly over the last couple years as our students recover/deal with the pandemic and the effects it has had on their lives. Over the previous 3 years we have worked hard on education staff to use the 4 tiers and not jump directly to tier 4 when support is needed. This is still a work in progress.

What I am finding is that tier 4 support takes time and patience needs to accompany this as all the other strategies for support have been exhausted.

These participant quotes speak to the importance of honoring the procedures and processes that ensure that CR is functioning with fidelity, as well as capturing the need for more support.

The tiering of supports is organized using Dossier, a software tool that allows school leaders and teachers to tier the supports needed for students. This tiering of supports is deemed to be an important shift that sets CR apart from other tiered interventions. Participants found this software helped them with the identified challenge



of a lack of screening tools at the secondary level. Dossier provides useful data, in timely ways, and is readily available to drive action. One teacher survey participant (R48) stated this about this CR tool:

Dossier has allowed teachers to know which students need support, what support students need, who has been contacted to help support the student, changes in the student's educational needs that all teachers need to be aware of, which students are graduating and what they need to graduate, what has been able to help the student in the past that has been successful, what students' current needs are.

Survey Question S3 addressed how respondents perceived their access to Tier 4 supports. Of 57 participants, 19 indicated they are not as satisfied with their access to Tier 4 interventions. Although only 5% of participants indicated a great deal of satisfaction with their access, 75% indicated some degree or quite a bit of satisfaction with their access (see Table 10). Of the Tier 4 supports deemed the most important, 18 participants mentioned mental health support in schools in the short answer explanations.

This finding was consistent among teachers, administrators, and district office personnel. The software tool (Dossier) mentioned by respondent R48, speaks to the research on the lack of screening tools at the secondary school level, and offers a solution to data that can be accessed by staff that does not necessarily require Tier 3 or Tier 4 testing or intervention.

**Qualitative Interview Findings.** Analysis showed mental health and educational assistant support to be extremely important to participants (see Appendix E). The other supports indicated by participants to be important to assist students in achieving high school graduation are career counselors and learning coaches. In response to Interview

Question 6, participants stated what they, as CR team members, deemed important in their roles to assist students on the path to high school graduation.

One interview respondent (Mark) felt the strain of losing a key stakeholder, career counselors, who helped students on the path to high school graduation: “They took away school counselors in our district 5 years ago. Yes, we have a counselor who pops in, but I don’t believe it’s daily and we do not have enough resources to provide this guidance in as meaningful a way as before the cuts.”

Teacher interview participant (Kevin) offered that mental health was a key area where support is needed: “Considering the impact the pandemic has had on everyone’s mental health, you would think that our school district would’ve reinstated full-time counselors in schools.”

Interview respondent (Mark) further stated that targeted support for students in junior high is not what is needed to address learning needs at the higher grade levels:

Time to do small group work, when students need intervention, would add another layer of support. Often the level of intentional, small group support a teacher can give is limited by class size or teacher availability. In elementary, students struggling with reading are pulled out for LLI [levelled literacy instruction] and it would be really useful to have pullouts for our high school students who are struggling.

Another interview respondent (Sherri) claimed that students with moderate needs often slip through the cracks and do not receive the interventions that would benefit them.

High-needs students have access to supports and we tend to address their needs quickly and successfully. Too often it is the moderate-needs students that rely on

teacher interventions and those are not always successful with supports that are available.

These participant responses portray the issues that are related to access in high school settings, like the need for mental health support, small group instruction, and more support for students with moderate needs. Further, that the support needed for high school students include career counseling, and learning coaches to help mitigate the strain on teachers.

### **Effectiveness of CR Processes and Structures (RQ2)**

The second research question asked “How do SSTs describe their implementation of CR as they engage in supporting at-risk students?” Five survey questions (ET1–ET5) asked participants to rate the effectiveness of CR and one question (E6) asked them to explain in short answer form the reason for their rating. Survey question (PS6) offered participants an opportunity to share a success story that showed CR as contributing to graduation.

Interview Questions 2, 3, 4, 7, and 8 were relevant here as well. Question 2 asked participants to describe a typical SST meeting and then to do a card sorting activity rating the key guidelines for importance. Question 3 asked participants about how they viewed the importance of the structures to assist students to stay in school and graduate, Question 4 involved asking participants to discuss the importance of the teacher role in CR and then to share how CTM and SST members interact with one another, and finally Questions 7 and 8 focused on the success of the team to improve students’ connections to school, as well as the effectiveness on building relationships, retaining students, supporting academic learning, and improving graduation rates.

Two findings were derived from the questions that pertained to the effectiveness of CR across two school divisions (see Table 12).

**Table 12***Themes and Categories for Research Question 2*

Themes	Categories
Structures play a key role in CR	Embedded time District Support Creative Scheduling Roles in CR
Layering of teams increases CR success	CTM SST Communication

*Note.* CR = Collaborative Response; CTM = collaborative team meeting; SST = Student

Support Team. Codes and themes can be viewed in Appendix E.

***Structures Play a Key Role in CR***

Structures in CR and the guidelines that shape meetings were deemed by participants to be integral for CR success. Across data platforms these structures, procedures, and guidelines were supported as vital for CR implementation.

**Quantitative Survey Findings.** Survey Question PS5 asked participants to indicate which resource supported them the most in making improvements to their CR teams to function with fidelity. Table 13 shows the number and percentage of participants that chose each resource as the most important. Embedded time to conduct CR meetings was the most frequently chosen, with 34 respondents (59%) selecting it. Participants across the three schools indicated that embedded time in their schedules to collaborate was the most important resource to support their needs. As shown, the distribution of results was similar across all schools. Specialist support was chosen by nine participants (16%) to be most important, while professional development was chosen by four participants (8%) to be the support they needed the most. These findings speak to what

participants relayed about the importance of meetings to be embedded, with the right stakeholders and held in timely ways.

**Table 13**

*Resources Participants Rated as Providing the Most Support*

Category	School A		School B		School C		n	%
	T	A	T	A	T	A		
Embedded collaboration time	8	2	8	3	10	3	34	59
Specialist support	3	0	2	0	4	0	9	16
Professional development	1	0	0	0	2	1	4	8
Other	0	0	1	0	3	0	4	7
Prefer not to answer/ no response	0	0	0	0	0	0	0	0

*Note.* A = administrators; T = teachers.

Key guidelines were ranked as important for participants. Table 14 shows how participants ranked the importance of key guidelines within CR and indicates that participants found implementation of the guidelines to be highly important to the function of the team meetings. The highest ranked guidelines involved team norms be visualized (96%), meeting agenda and notes established (95%), and maximum adult roles involved (91%). The next structures of importance were celebrations to begin the meetings and actions focus on universal support both ranked at (88%), team prepared to focus on key issues (86%) the focus on key issues (80%) and teams coming prepared to have conversations about key issues that have been identified (86%). The lowest ranked structures were meeting agenda and notes documentation established (77%) and roles

clearly defined (68%). Table 14 shows the participant responses, with a percentage attributed to those who selected a 4- or 5-star rating for the guideline or structure.

Participants spoke to how some guidelines were so routine, like who plays what role in meetings, that they did not need to be reviewed each time. The respondents spoke to how the timekeeper, the recorder, and the facilitator were typically the same staff members for each meeting.

**Table 14**

*Survey Participants' Ranking of Key Guidelines Within CR*

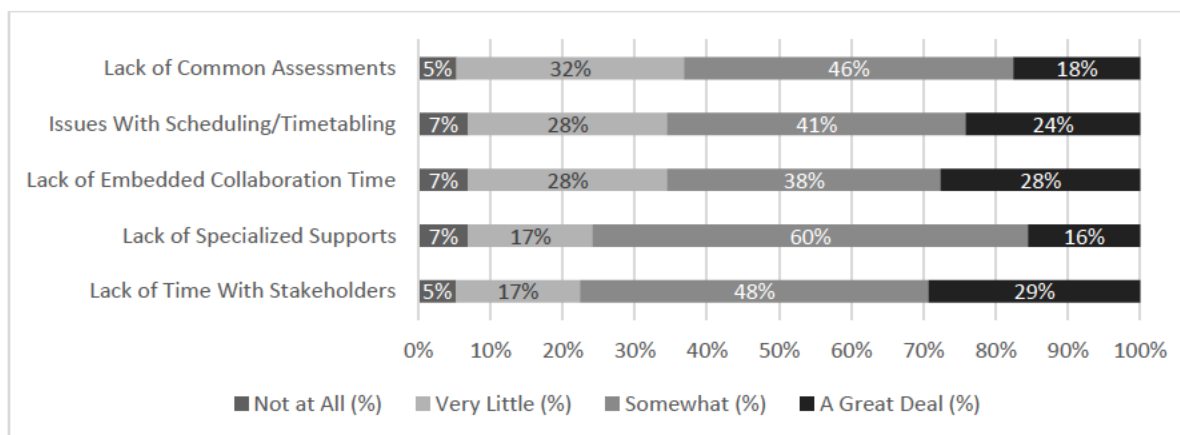
Key Guideline	<i>N</i>	<i>M</i>	<i>SD</i>	Median	4- or 5-star rating (%)
1. Team norms visualized	56	4.64	0.55	5	96
2. Meeting agenda and notes established and projected	56	4.57	0.59	5	95
3. Maximum adult roles involved	56	4.39	0.77	5	91
4. Celebrations to begin the meeting	56	4.39	0.79	5	88
5. Actions determined are universal classroom support	56	4.34	0.74	4	88
6. Team prepared for the conversation - key issue identified	56	4.50	0.78	5	86
7. Discussion focused on key issues	55	4.29	1.07	5	80
8. Meeting agenda and notes documentation established	56	4.11	1.11	4	77
9. Roles clearly defined for the meeting	56	3.98	1.08	4	68

*Note.* *N* = 56. Response values are not the same because some survey respondents left a rating blank. A rating of 1 star indicates low importance and 5 stars indicates high importance.

Barriers were indicated by participants in supporting students across the four tiers of intervention. Figure 9 captures participant perceptions of support.

**Figure 9**

*Barriers That Exist in Supporting Students Across the Tiers of Support*



Note.  $N = 58$ . Participant responses from the three schools were nearly identical and thus are reported together. Not at all ratings mean it is not perceived to be a barrier by participants, and A great deal rating indicates that this barrier exists to a high degree.

Of the 58 participants, 29% of respondents rated a lack of time with stakeholders as a barrier impacting CR implementation a great deal, and 48% stated it was somewhat of a barrier. The next barrier to observe is lack of embedded time, which 28% responded was a barrier that impacted them a great deal and 38% indicated was somewhat of a barrier. Scheduling was deemed by 24% of participants to hinder CR implementation a great deal, while 41% indicated it was somewhat of a barrier. A lack of specialized supports showed 60% respondents finding it to be somewhat of a barrier, and 16% finding it to be a barrier with a great deal of impact. A lack of common assessments was



one of the lower ranked barriers with 18% of participants rating it a barrier of a great deal, and 46% indicating it was somewhat of a barrier. The two highest barriers were lack of time with key stakeholders (29%) and a lack of embedded time for collaboration (28%).

**Qualitative Survey Findings.** Embedded time to collaborate was a prevalent theme in responses to the survey, the short answer survey, and interview questions (see Appendix E). Participants stated that embedded time is essential (39 survey respondents, 15 qualitative survey comments, and 11 interview related responses).

***Embedded Time.*** One survey participant (teacher, R22) elaborated on the impact of embedded time in a short answer response to survey Question S4: “The teaching profession has been more complex as student needs and life complexity have grown exponentially. Schools that created weekly embedded collaboration time have seen the greatest success in meeting student needs.” This response indicates that the ability of CR to function with fidelity, embedded time every week is required for success. One survey respondent (P8) in response to Survey Question PS4 captured the importance of embedded time function in timely ways:

Schools that have continued to deepen their learning and implementation in the use of collaborative processes and structures and the varied level of meetings have been much more successful. Schools who have also embedded time for staff to meet more regularly are also seeing more success in addressing student issues in a timelier manner.

Interview themes and survey findings were consistent in identifying that embedded time meeting with stakeholders was critical for CR success. An administrator (R43) stated in a survey response:

Our collaborative team approach was embedded, and we set up monthly meetings with admin, FSLWs [family school liaison workers], mental health capacity building, division office specialists, and our resource officer, to not only discuss our most difficult students but to put a broader plan in place to support all of our students in different areas, mental health being one of them.

Embedded time was stated to be an area that required improvement, as one survey respondent (R31) stated: “I think CR and the supports/strategies needs to be ‘tailored’ for each individual school. I wish we had embedded time other than collaboration days to meet more frequently to catch ‘kids at risk’ earlier.”

These responses indicate that embedded time requires the right stakeholders are present, that meetings are offered in timely ways, and that strategies focus on what is best for all students.

***District Office Support.*** District office support was mentioned in 12 survey responses. One administrator respondent (R43) described how systems (layers of teams, district office, and specialized support personnel) all need to work collaboratively to address the issue of embedded time. The complexity of high school schedules and district office consideration for specific school contexts was addressed as the respondent stated:

CR meetings are not often enough. Although Collaboration Days are fantastic meeting days, secondary timetables do not lend themselves nicely to “embedded time,” particularly as FTE [full-time employment] decreases when student

numbers increase. We need embedded time for CR to function well. The district designating days for this helps, but we also need time where key people are present, like EAs [educational assistants] need to be there.

This quote addresses the complexity of the implementation of embedded time in high school settings, and how every member involved in CR must work together to tackle the issues involved in providing this essential time to meet.

***Creative Scheduling.*** The issue of high school schedules was addressed in response to Question B3 by another participant who did not indicate their role (R36) as they responded: “School leadership and their belief in the CR process contributes to embedded time. An administrator's abilities to timetable or schedule flexible time for CR process is important.”

A teacher survey respondent (R48) appreciated the embedded time to tackle problems head-on in timely ways, and commented on how it helped to support and network around the key issues that students were facing. This support was noted to be most valuable when it was a chunk of time uninterrupted to the CR work, and not just short periods of time sporadically.

The networking and support of other teachers, the online and in-person support from Jigsaw Learning, a network of CR’s support system, are captured here by respondent (R48): “We have a great system in use. Dossier has made our CR work much easier, and we can use it daily instead of waiting to meet once a month.” Dossier is a software tool that allows schools to tier their interventions and place students in the appropriate tiers. School B flagged and sorted their students and interventions in the 2021–2022 school year, and School A recently completed this process. School C has yet

to complete this work. Depending on the stage of implementation, the establishment of the structures, the routines, and the embedded time to collaborate without interruption, schools will be at different stages of implementation. This timely access to data reflected by (R48) is important to notice, as this was identified by participants as a need. Further, the lack of screening tools, assessments, and Tier 3 and Tier 4 access to identify students who need intervention, are perceived to be areas of concern for teachers and leaders.

Survey participants were asked one open-ended satisfaction question (PS6) to elaborate on CRs contributions to improving graduation rates, and one open-ended question (B3) that asked participants to explain their ratings in Questions B1 and B2. Question B3 asked participants what contributes to eliminating barriers in their situation and to elaborate on any other barriers not listed that interfere with the implementation of tiered supports for students. Twenty-six participants offered feedback on what impedes their implementation of CR. The responses mostly related to time (with three related responses), leadership's ability to schedule (with nine related responses) or embed time to meet (nine responses), the supports available for mental health (10 responses), the need for more educational assistant support (15 responses), and class size stressors (eight related responses). Common assessments were mentioned by participants to be a barrier (four related responses). All these barriers speak to the unique nature of high school settings. One survey teacher respondent (R34) explained the importance of the leader to schedule timely meetings in CR:

I feel as though a time built into a weekly schedule would benefit a CR a great deal more than a day here or there every couple of months. It would keep things fresh and staff would be able to adjust on the fly and be in the loop easier without

trying to find others on the team to let them know key information when we could squeeze in a moment. A dedicated time in the week, even if it was short would really provide more consistency.

Further, in response to feedback on the barrier of embedded time, and why it is important to respond to student need or key issues with the appropriate stakeholders involved, another teacher participant (R22) indicated:

In the schools I have been at that have embedded collaboration time increases the engagement of the stakeholders at the table. Increase engagement has meant more buy in to the process and greater success of student achievement, attendance, and engagement.

As it relates to time with key stakeholders, one teacher (R19) relayed: “I think support staff are valuable members who should attend collaboration days and due to budgetary restrictions aren’t able to attend. Not having their voice at the table is unfortunate as they offer valuable feedback.”

Specialized support related to key stakeholder involvement with embedded time and was mentioned by another teacher respondent (R26) in relation to assessments, and it should be noted that specialized support is one area that respondents have asserted they have a harder time to access in rural settings:

My work is related to mental health. Our division doesn’t have any universal mental health or SEL [social-emotional learning] measurements, so support is allocated upon the subjective assessment of the school and wellness support teams. It would be very helpful to have an assessment tool to supply a foundational base to target supports.

Further, as it relates to the barrier of common assessments, academic screening was discussed by a teacher participant (R14) to be problematic for CR success:

High school screeners are not easily accessible and the ones we have used are cumbersome and take a very long time for staff to input data. Once data is entered, we have yet to find a successful way to analyze it in a way to incorporate changes into our practices to address student needs. Ultimately, we need more functional screeners for high school literacy and math.

One administrator participant (R12) linked common assessments provided to be disjointed from the goals set in CR: “A lot of our common assessments tended to not actually test the outcomes we had as goals in our CR meetings and therefore did not really provide accurate information that we could use.”

Survey Question PS6 asked participants to elaborate on how effective their teams were at improving graduation rate (see Table 17). An administrator (R31) commented on the survey on improvement of graduation:

Having students who are struggling have access to modular/self-paced learning, like outreach, but we call it in reach, so they are staying at our school has made a great difference in course/credit completion for our most at-risk students.

Targeted, supported, and learning facilitation has helped struggling learners to achieve, despite some behaviour or attendance issues.

The reality of stressed school budgets, large class sizes, lack of access to specialized supports came up as an issue in rural schools involved in this study. One participant (R37), who did not indicate their role, provided this summary of a perceived

strain relating to Question B3: “Identification of needs and proposed strategies, is only as effective as the implementation of these ... limited by resources, personal, and time.”

Finally, an administrator (R43) noted this in response to Question PS3, which speaks to the mental health theme found throughout the analysis of data involving CR implementation:

It is hard to say if any one thing has led to the success rates around graduation. Our current data would suggest that we have a lot of success in this area. I feel that CR is one thing that may have helped this success but not the only contributing factor. Strategic timetabling, career counselling services, extra option classes for students, and [school-specific initiative] have all had an impact on our graduation rates. At our school most of our students will graduate with well over 125 credits. Credits are not the barrier to graduation for most students. Wellness, attendance, and Mental Health issues seem to be our biggest barrier of student success.

High school settings have unique features that can be barriers for CR implementation. Finding embedded time to collaborate, time to meet with key stakeholders, and issues with high school timetabling were areas of struggle that survey respondents pointed to in Research Question 2 and reiterated for Research Question 3 as barriers to implementation. One example provided was that students in high school do not have one teacher all day, and because they take courses at different levels of academic rigor, there are challenges with finding common time for teachers of the same grade level to meet. Participant responses indicate that teachers and leaders are working to have

embedded time, access key stakeholders, and tackle scheduling issues that are unique to high school settings.

***Roles in CR.*** Participants commented in open-ended responses that team norms were so routinized that they did not need to be reviewed each time. The two CR guidelines considered most important by participants, as seen in Table 14, involved the focus on team norms (96%), maximum adults involved (91%) and teams coming prepared to have conversations about key issues that have been identified (88%). These guidelines relate to Survey Question ET6 by participants indicating how important they are to having meaningful conversations about students and key issues that they are facing. Further, in response to that question, which asked participants to explain their rating of effectiveness, satisfaction with process, and the team meetings that yielded the most success, one participant (R19) wrote about the importance of the guidelines to ensure meeting efficiency:

I think this process allows staff to have meaningful and purposeful conversations set on action items with specific strategies that teachers/team members can try.

It's focused so you don't get sidetracked and focus on the issue at hand. All the processes have a function and need to be honored so that the key issues can be addressed, and the communal strategies can be developed.

***Qualitative Interview Findings.*** Interview findings related to embedded time, district office support, creative timetabling, and roles required for CR implementation.

***Embedded Time.*** Interview findings for Research Question 2 were consistent with survey findings. All 11 interview participants spoke about the importance of the embedded time to meet with stakeholders to the success of CR. This is aligned with the



survey data reported in Table 9. In rural school divisions, as noted by (Sherri) access to the key stakeholders involved in Tier 3 and Tier 4 interventions can be challenging because they are not always “embedded in the schools that they serve.”

***District Office Support.*** Rural schools implementing CR have the same scheduling issues as urban schools; however, the access to Tier 3 and 4 supports are not accessible in the same way for rural schools due to being spread out across larger geographical regions. Short answer Survey Question S4 provided data to support the reason why embedded, uninterrupted time with key stakeholders is essential for CR success. Respondents to Survey Question S4 (22 related comments) stated that access to key stakeholders was there, but not available often enough (with embedded time) to support the school’s needs.

***Creative Scheduling.*** Interview participants discussed how important CR scheduling was and stated that embedded time to work collaboratively to support students in achieving key learning outcomes was of high importance (13 responses). One participant (Brandon) outlined the important structure of embedded time: “The teaching profession has been more complex as student needs and life complexity have grown exponentially. Schools that created weekly embedded collaboration time have seen the greatest success in meeting student needs.”

Further, this interviewee (Brandon) indicated they could offer their time to support CR implementation “in several schools.” This is important as access to key stakeholders and specialized support was listed as a barrier in open-ended responses to Question B3 (11 related responses for key stakeholders, and 10 related responses for specialized support). This interviewee’s ability to support several rural schools was

valuable because it provided the opportunity to share success stories and strategies from school to school across the district:

My involvement came from the lens of “together we work better,” and so it was with a lens of Collaborative Response, as a conduit to problem-solving, getting ideas from everyone around the table. And, you know, I was able to share ideas that had been used in other schools so people brought to the table what they knew, and so it wasn’t that I was coming in and being the expert in the field, I was a team player, and together we would address the needs of that specific student or students.

One participant (Mark) spoke to the structures and scheduling, which many participants (nine related responses) indicated are vital to CRs success:

My team is a well-oiled machine. I found our CRs quite valuable over the last few years. It was always a great opportunity to discuss celebrations and problems. Being in a small school where we had no departments, I found it refreshing to discuss with my colleagues about issues and concerns and discover that we saw similarities across the board. This school year, we have already discussed that we are looking forward to our next CR because there are issues arising already (and it’s only Week 3)! We were used to meeting every week last year, so not having a meeting yet is a concern for our team. I think this process allows staff to have meaningful and purposeful conversations set on action items with specific strategies that teachers/team members can try. It’s focused so you don’t get sidetracked and focus on the issue at hand.

Similarly, interview participants noted the importance of maximum adult involvement as well as the importance of varied perspectives at each team meeting. One participant (Chris), who is a counselor, stressed the importance of teachers supporting students at the Tier 1 and Tier 2 levels due to having limited resources to provide Tier 3 and Tier 4 support. They were intentional about scheduling time to meet with counselor, leaders and teachers in one school. The issue with embedded time in rural settings, is finding ways to collaborate with stakeholders who are not working near the schools they serve. Chris states:

If the teachers are doing a good job, and they really do have understanding of their role in Tier 2, it limits the amount of kids that come up to require support at Tier 3 and Tier 4. So that's very helpful to us because there's only a few of us that operate at the Tier 3, Tier 4 level in our division. So, if we can limit our time to the higher tiers because teachers are managing Tier 2, it helps us focus on the kids that need a higher level of support. My role in Tier 2 is with the counselors in all of the schools. I provide support to counselors through suggestions, strategies, referrals, and those kinds of things. So that we can keep the kids who require counseling at Tier 2 instead of coming up to require division support at the highest level.

***Roles in CR.*** Through a structured card sorting activity of the processes and structures in CR (Interview Question 2a), every interviewee discussed key elements of the structures and their importance in the function of CR processes. Across all three schools, participants relayed the importance of roles, celebrations, focus on key issues, and being prepared as the top four processes of importance in CR implementation. It is

interesting to point out that across all three schools, in relation to being asked why they organized the cards this way, participants stated that roles established, norms visualized, celebrations at the beginning of the meeting, and meeting notes visualized were so entrenched in their meeting rituals that they did not need to be reviewed each time they met. Every participant stated that all the structures were important; however, some did not require as much focus based on the year of implementation. One interview respondent (Joe) expressed the importance of structures:

Part of it is, if we don't follow the process, it is such an important piece of CR, we go back to just talking or lamenting with no action. Now, with knowledge of the structures, we use the agendas and are writing stuff down and documenting the key issues. The fact is that we're also creating a journey, and documenting for that student and benefiting many more students because we identify that they have the same key issue. The intent is that we come back to that, we don't just write it down and not follow up. It's like, as educators or as administrators, then through our instructional leadership, we can follow up. If the teacher can reflect on what they have implemented that makes the student engage more, that's the piece that is going to help them graduate because if they're engaging more because of something that you put in place, that's the impacting factor that will help push students toward success, graduation, all the rest of that, whether it's a CTM meeting or SST work.

### *Layering of Teams Increases CR Success*

The participants communicated about the importance of teams working together to support the needs of students in rural high schools. They were asked to rate the function of CTM, SST, and how they work together in CR implementation.

**Quantitative Survey Findings.** Participants from all three schools indicated that they were at the stage of implementation where the CTMs were functioning well. As displayed in Table 15, the participants indicated that CTMs had been successful in their CR implementation, with 46% indicating great success and 52% indicating some success. For SST meetings, 23% of participants indicated great success, and 68% indicated had some success. Specific school interventions had similar statistics to the SST meetings with 17% indicating a great success, and 74% indicating some success. The survey participants who were a part of the SST group indicated in (S4) short answer comments that they wanted to improve their communication with CTM members.

**Table 15**

*Resources That Survey Participants Indicated Provided the Most Support*

Resource	Very little success <i>n</i> (%)	Some success <i>n</i> (%)	A great success <i>n</i> (%)	Total
Collaborative team meetings	1 (2)	29 (52)	26 (46)	56
Student Support Team meetings	5 (9)	36 (68)	12 (23)	53
Specific school interventions	5 (9)	40 (74)	9 (17)	54
Other	1 (25)	1 (25)	2 (50)	4

*Note.*  $N = 58$ . Student Support Meeting members provided specific school interventions that may not have been communicated to teacher participants.

Table 16 shows the participants' level of satisfaction with the CR implementation, procedures, and structures. Those participants who indicated "quite a bit" or "a great deal" of satisfaction with CR processes and structures accounted for 36% and 17%, respectively. Satisfaction "to some degree" was selected by (38%) participants. No one selected "not at all" satisfied, while "very little" satisfaction received four ratings (7%).

**Table 16**

*Participant Satisfaction With CR Implementation, Procedures, and Structures*

Degree of satisfaction	<i>n</i>	%
Not at all	0	0
Very little	4	7
To some degree	22	38
Quite a bit	21	36
A great deal	10	17
Prefer not to answer/left blank	1	2

*Note.*  $N = 58$ . CR = Collaborative Response. The highest number of participants chose "to some degree" but indicated satisfaction in the explanation of ratings with a recognition of work yet to be accomplished.

**CTM and SST.** Participants were asked to rate from 0 to 10 the effectiveness of the teams involved in CR in Survey Questions ET2–ET5. Scores from 0–4 are categorized as "not effective" and scores from 5–10 are categorized as "effective." Table 17 provides a summary of the participant perceptions of the effectiveness of the teams, communication between teams, and the effectiveness of CTMs and SSTs to support students to graduate. Regarding the overall effectiveness of the CTM driving SST involvement in supporting students, 74% of participants rated it as effective by scoring it

7 or higher out of 10 ( $M = 7.28$ ,  $SD = 1.96$ ). Participants also rated the SST to be functioning well, with 63% of participants scoring it 7, and 23% rating it at 5 or 6 out of 10 ( $M = 6.91$ ,  $SD = 2.04$ ). For the effectiveness of the communication between CTM and SST members, 70% of participants scored it 7 or higher out of 10 ( $M = 7.00$ ,  $SD = 2.29$ ), and 13% rated it a 5 or 6 out of 10.

**Table 17**

*Survey Participants' Perceptions of Effectiveness of CTMs and SSTs*

Criteria	<i>N</i>	<i>M</i>	<i>SD</i>	Median	Not effective (%)	Mixed (%)	Effective (%)
Effectiveness of CTM to drive SST's involvement in supporting students	54	7.28	1.96	7	7	19	74
Effectiveness of communication flow between CTM and SST	53	7.00	2.29	8	17	13	70
Effectiveness of SST in your school	56	6.91	2.04	7	14	23	63

*Note.*  $N = 58$ . CTM = collaborative team meaning; SST = Student Support Team. Scores could range from 1 = *not effective* to 10 = *very effective*. Scores from 0–4 are categorized as “not effective,” scores from 5–6 are categorized as “mixed,” and scores from 7–10 are categorized as “effective.” The percentages are expressed based on participant responses and do not include blank responses.

The effectiveness of SST was rated as effective by 63% of participants, who are mostly teachers. This speaks to the need for teams to communicate their work, strategies and interventions with every layer of team involved in CR.

**Qualitative Survey Findings.** Participants elaborated on their survey responses to Questions ET–E5 in the open-ended questions, with 28 respondents supporting their ratings of the effectiveness of teams in CR.

*CTM and SST.* Being focused during CTM meeting was listed as a strength among 10 survey respondents. Three survey respondents from school A stated that it was too early to answer questions about effectiveness based on the amount of CR meetings they had. The year of implementation is of importance to participant responses and has been evidenced throughout this study. The mechanics and complexity of the meetings take time to become well versed. One administrator (R16) wrote on the survey:

Our CR's are still only a year into full implementation (so only about 6 meetings in). Overall, we have adapted to the structure and purpose quickly, but still have a way to go before we go from the mechanical stage of use to the proficient stage.

*Communication.* CTMs and SSTs work independently and collaborate when needed to support students who struggle. One administrator (R16) discussed the importance of working together as they spoke about key guidelines and team interactions in response to Question ET6 about team interactions: “Students that are referred to the SST team with significant needs are most often successful. Often follow-up appointments with the FOW [family school liaison] can address an area of concern that the school and parents can address.” This participant quote highlights the importance of the team’s ability to communicate so that they function together, the time it takes to get to this level



of function, and the positive results that occur when these processes function with fidelity.

The importance of communication was further addressed by a teacher (R13):

There is limited communication between the CRM [collaborative response model] team/SST and the teachers. This leads to confusion about whether or not we need to continue addressing the same issues or change the way it is addressed because we do not know if the teams have tried anything.

The distinction between this administrator view and teacher perception was found in other areas of this study, and speaks to the importance of each level of team meeting to clearly communicate with other teams about what they are doing.

**Qualitative Interview Findings.** Many participants spoke about the teams, meetings, and importance of how they are configured.

*CTM and SST.* Mixed grade and subject area groupings is one structure that participants found to be useful in rural schools. The varied perspectives of teachers from different grade levels is linked to past teachers having knowledge about a student that teacher's in higher grades did not know. Rural school configurations lend to having multigrade representation at certain levels of CR meetings, and in the opportunity for every student to have one teacher that has a connection with them. One participant (Brandon) spoke positively about the layering of meetings that led to student success:

I know of many students who were struggling with attendance and academics.

Our administrative team as well as our classroom teachers really grew in being creative and supporting specific students with what they needed. So, it might be providing them with work in a nontraditional way. Maybe it was more project

based, but we really catered to what those students needed by sharing strategies from CTM to SST. The most significant way that happened was through our CR meetings because it allowed us to become aware of the students with these key issues and that allowed experts to share strategies and allowed a veteran math teacher to share strategies with lesser experienced math teacher.

One counselor respondent (Chris) stated the importance of the SST working collaboratively with the CTM staff in order to support students with their mental health challenges, as well as build the capacity of staff to have training in supporting this key issue:

What I learned as a support person is I need to get out of the way of the relationships that are already established. So just because I have counseling skills doesn't mean that I'm the one that kids are going to want to talk to. So, put my ego aside and let the kids talk to the people that they want to talk to, making sure we can support the people that are being spoken to. So, I think that's an important step. That's something that I learned.

This collaboration among stakeholders to find a more sustainable, readily available support for students was addressed by another interview participant (Adam), who stated that the CTM identified a key issue that students needed teacher support to address their ongoing mental health struggles. The issue was referred to the SST to come up with a strategy to implement:

The high school population is an at-risk population for mental health problems because of their stage of development, which has been further complicated by the isolation many experienced during COVID. We worked collaboratively with a

high school administration team, and as a wellness supports team, to create a universal approach to supporting student mental health that teachers could deliver. It utilized student feedback from multiple sources. It has been well received by staff and students alike and is likely to be repeated as an initiative in other high school populations in our division. The CR process was integral in generating this unique and timely response.

**Communication.** Teacher participant (Kim) stated that the SST, administration, and CTM all need to work together to have teachers understand the “backstory” of the struggling students in their classes. The configuration of the team meetings allowed the learning coach, who had specific information about a student, to be relayed to teachers:

The communication back to the classroom teachers is important so that they know that little Sally has been sleeping in her car for three nights. SST and administrators might know this, but that has to be pared down and teachers need to know that right away. If teachers knew the back story, they would be more willing to stay the course. High school teachers are working to get through their course content, but with this kind of information maybe they could ease off on the content and work more on the relationship with the student.

Several participants (10 related responses) discussed the importance of having varied perspectives (by role, grade, and expertise) and key stakeholders in the embedded CR meetings. This is consistent with survey findings where 91% of participants indicated maximum adult involvement is of high importance. One interview participant (John) stated: “Time for teachers and EAs [educational assistants] to collaborate brings fresh

perspectives on the student’s key issues and then several strategies can be implemented, reported on celebrations, or continue to brainstorm how to solve the key issues”.

### **SST Outcomes (RQ3)**

The third research question asked “What are the perceived outcomes that SST members observe from their work in keeping students on track to achieve their high school diploma?” Survey Questions ET1–5 and PS1–3, and open-ended Survey Questions ET6, PS3, and PS6, applied to this research question. Survey Questions B1 and B2 also gave respondents opportunity to indicate some of the barriers unique to secondary school settings, and to elaborate on those in Question B3, or offer other barriers that impede CR implementation that may not have been indicated in the survey. Table 18 identifies the themes that were inductively identified in relation to Research Question 3.

**Table 18**

*Themes and Categories for Research Question 3*

Themes	Categories
CR improves teaching practice	Build teacher capacity Trust Communication
CR enables distributed leadership	Leadership Succession
CR positively influences educational outcomes	Attendance Belonging Graduation Academics

*Note.* Codes and themes can be viewed in Appendix E.

### ***CR Improves Teaching Practice***

Qualitative survey and interview data suggested that participants perceived that CR helped teachers to grow in their professional practice of supporting students who struggle in high school. CR was stated to improve the capacity of teachers. The layering of team meetings was one of the ways survey participants relayed that teaching practice was improved. The following categories supported this theme: building teacher capacity, trust, and communication.

**Building Teacher Capacity.** In response to Question PS6, one survey respondent (P2) stated:

The language and conversations at the school level during collaboration time are success focused and less about making excuses or blaming others. Teachers are action oriented and offering ideas and strategies to their colleagues. There is more of a shared sense of ownership for all students. Needs for professional development are arising out of a need to deepen teacher learning.

Survey respondents mentioned CR as a tool for improving teacher capacity (14 related short answer responses). An administrator (R43) responded to the “anything to add” section of the survey:

Although CR is a very structured process, schools need the ability to alter the process to suit their individual school needs. Running a CR meeting in a smaller rural school is very different than running a CR meeting in a large school.

Flexibility is key around the delivery of these programs. Having said that there are still some important things that must exist around that structure to ensure success.

I have also liked how the process over the last few years has shifted from focus

solely on student (and what they can't do) to teachers (how can we support). This is essential if schools will continue to get buy-in from staff and work toward school improvement.

**Communication.** Improving teacher capacity occurs through CR processes, structures, clear communication, and ongoing support. The ability to work intentionally with colleagues has helped teachers to move out of their classrooms and into more collaborative approaches where they can communicate with their colleagues about strategies. One respondent (R30) relayed:

We have had a lot of success for teachers and support staff who can come together to find common solutions to an issue. Instead of living in a silo, the staff can discuss their common issues and be solution focused. This has had an incredible impact on many students and support staff in thinking outside the box.

**Trust.** The structures and processes of CR are of high importance to the work of collaborating to improve student outcomes and teacher practice. One teacher participant (R29) spoke to the importance of structures to improve the collective efficacy of the group:

The structure helps keep everyone on task for the action items and kids succeed because of the monitoring. They feel like staff care about them with this approach. Collective Efficacy of the group helps students to succeed. Honestly, every school should run CRs. It is the best PD [professional development] we have.

This response is representative of the 28 related responses to Survey Question ET4 about the effectiveness of team interactions. Participants explained their ratings in

the open-ended questions. In four of the short answer responses, participants stated that the key guidelines allowed teachers to have more trust (using terms of relationship, vulnerable, safe, trust, and sharing without fear) in their conversations because the processes, norms, celebrations, and roles in the meetings kept the conversations on key issues, which helped participants feel more focused. These respondents relayed that the routine of the structures lead to teachers feeling less threatened by the conversations. The structures in CR ensure that everyone's voice is heard, and there are members of the team that can intervene when norms are being broken, which contributes to safety in conversations.

The participants' open-ended responses to Question ET6 mentioned the need for more mental health support for students (10 related responses), and in one division the need to ensure that educational assistants were a part of the collaboration day meeting schedule (15 related responses).

**Qualitative Interview Findings.** In interview responses, participants discussed how CR processes and structures helped teachers to become better.

***Building Teacher Capacity.*** They explicitly stated that CR builds a teacher's capacity (15 responses). One interview participant (Brandon) discussed this:

By using this process over the years, I would say we are very cooperative in our work. Through Collaborative Response work when people are fine-tuning the processes, teachers are starting to share the practice, question whether something's working, question and ask, "How can I do that? What should I have tried?" Teachers now state what they are struggling with, and some people have gone deeper. So, I certainly think that they have been able to shift the

conversations to become more impactful, and ask, “How do we tell if it’s working?” That whole idea of asking how it will look in different settings so that we’re not overgeneralizing. So, in our work with the support team meetings, we understand that it’s not just a broad stroke. We must get specific and individualized to ensure success for any student. This has helped with the overall goal of supporting students to graduate from high school.

Further, in relation to growing the abilities of every person on the team in their work, the same participant (Brandon) stated:

I would say that the process is so honoring to everybody’s voice. And I think that’s what’s important, and through our walkthrough meeting visits, I’ve watched our administrators grow in their ability to facilitate conversations. I’ve also seen teachers become more competent in sort of trusting the process and trusting their administrators as another voice in the room and not the leader or the person that’s going to tell them what to do and give the answers.

One participant (Adam) provided an example of how the key stakeholder of specialist support lent to improving life outcomes for students by increasing teacher capacity:

The specific example I have of how SST helped to build teacher capacity was when at one school we accomplished the implementation of regular mental health information getting to students that are hard to reach. When we do that, from a preventative perspective, what happens is that students have a better idea about where to access mental health support. They are building their skills; they’re building their connections to their teachers and to their peers. It’s destigmatizing mental health discussions, mental illness, and mental distress. So, all those things



go towards creating a mentally healthy culture in a school. I think as an outcome, ideally, what it does is reduces the impact on a school building from a mental health perspective because then, like the people who are the higher-tiered supports in that building related to mental health are able to deal with the difficult things when they're happening, because the students may know that there are other helpers that they can access or maybe they are implementing positive coping skills, or they've made connections with additional staff members that can support them. I think there's just a ton of different outcomes that we don't even know exist. I also think that teachers themselves feel more competent in supporting students through because of these lessons that we ended up implementing.

Further, that same interviewee (Adam), in response to Question 7, talked about building teacher capacity to address some of the issues cropping up in mental health needs in the Tier 3 or Tier 4 category, and how they built supports that allowed them to employ a more universal (Tier 1) and targeted (Tier 2) intervention. Many survey respondents (14) spoke to the need for support with mental health training or support, Adam states:

We really focused on the teachers and how the teachers could support their students and how we could build the teachers' capacity. We knew that they needed to feel comfortable and teach it in a way that they could become better connected to their students and the students felt more connected to them. And that was, in fact, the entire first lesson, which stressed the importance of connection and we just carried that throughout. So, I think that was a strength!

An interviewee (Veronica) emphasized the importance of having varied perspectives and educational assistants as a part of the embedded CR meetings to build trust among team members:

Having that mixture of different teachers, like math and science teachers, where they can share different strategies that they can try to use that crossed the gamut of that grade level, or even different levels of grades too. That's the biggest role of the principal, to organize different variations of how to pair people together to build trust. We have our student assistants join us—so I'm not sure if all schools include student assistants, but we did. So, that makes a difference to have targeted days in the calendar where all staff are there for CR meetings and that must include EAs [educational assistants].

This participant response is indicative of the importance of the structures of layered team meetings to include varied perspectives so educators can examine the best collective classroom practices. At the time of this study, one district included student assistants in CR calendar days, and one district did not include educational assistants. As shown by Veronica and Chris as well as evidenced in quantitative survey responses and short answer survey responses, embedded time with key stakeholders is vital to CR success. In rural schools, the mixed grade level meetings are a reality for CR implementation, and respondents have shown that there is value to having access to the support so that varied perspectives are involved in meetings. The complexity of rural high school settings requires thought on how to create the embedded time that is critical in addressing the key issues that these school populations are facing.

**Communication.** One interviewee (Veronica) addressed how CR promotes teacher growth through collaboration and the layering of teams to grow in perspectives.

This collaboration encourages teachers to share their practice or ask for help:

I guess that the CR role is that it's not just our guidance counselor that works with those kids but it's everybody. Now we're all involved in and raising this child. So, I guess it takes a village to raise a child. I think that's what I see. The biggest thing is that the student can't hide in a classroom by saying they can opt out in certain classes. Now they know that teachers are communicating they are going to say, "I'm helping you, and if I can't help you, we're going to get someone else that can."

**Trust.** An interview participant (Brandon) spoke to the growth of leadership due to the support-to-independence model inherent in the CR coaching approach. This model is designed to take away fear and build trust in CR teams.

I love the support-to-independence model. And I've always been a proponent of "you're out there you're doing it, but we're going to support you along the way ... [and] keep giving you feedback and it's just about making your skills better."

There's nothing evaluative. The other thing is the differentiation of support so it isn't an expectation that everybody's at the same place, that's not realistic, and there never will be because of the constant movement and shifting of people. But that's why we keep taking each group, each team where they're at, and moving them forward from there. And we're doing the same thing with our own directors and senior leadership team is we're moving our learning forward, one step at a time.

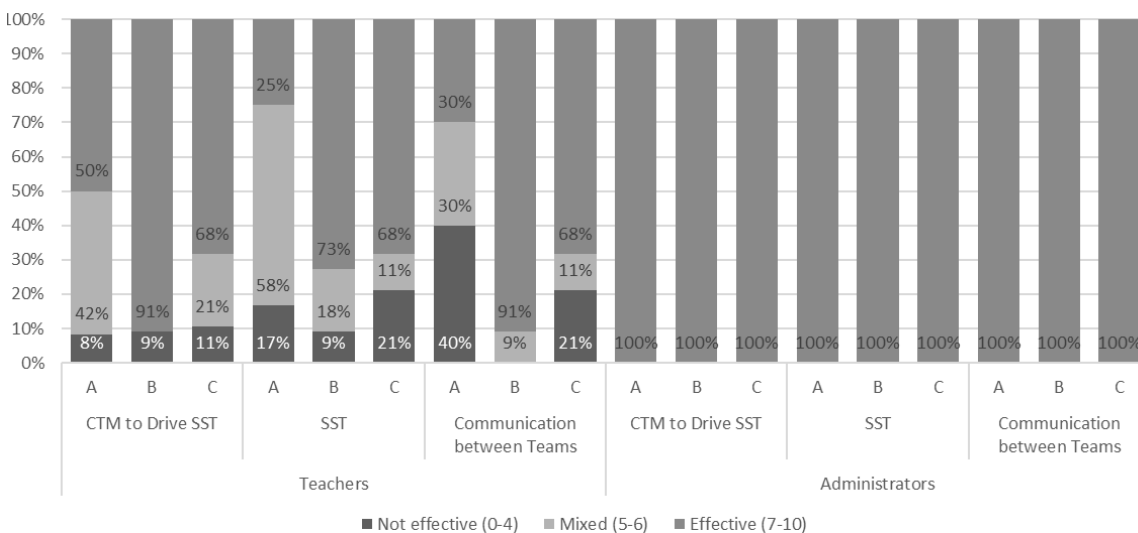
**CR Enables Distributed Leadership**

Administrators, teachers, and district office personnel discussed how CR has leaders working elbow to elbow with one another, and with teachers as equals. This distinction was perceived by staff to be important in eliminating fear of judgment and creating environments of trust, in order to grow professionally. The importance of clear communication between layers of teams was deemed critical in CR work.

**Quantitative Survey Findings.** Figure 10 addresses Survey Questions ET2–ET4 and shows survey responses disaggregated by school and by role (teachers and administrators). This survey finding reflects a disconnect between administrators’ views on effectiveness versus teachers’ views on effectiveness.

**Figure 10**

*Effectiveness of CTM, SST, and Communication Between Teams*



*Note.* CTM = collaborative team meeting; SST = Student Support Team. This figure does not reflect the number of respondents that left the question blank.

All administrators, from the three schools in this study, rated the effectiveness of their CTM to drive SST, SST effectiveness, and communication between teams at 100%. Teachers from School A, B, and C rated the effectiveness of CTM to drive SST at 8%, 9%, and 11%, respectively, perceiving it to be ineffective (0–4). Scores of 42%, 0% and 21%, respectively, showed a mixed rating (5–6) of somewhat effective, and finally scores of 50%, 91% and 68%, respectively, showed a rating of effective (7–10). Teachers rated the function of their SST to be ineffective (0–4) at 17%, 9%, and 21%, respectively, somewhat effective (5–6) at 58%, 18%, and 11%, respectively, and effective (7–10) at 25%, 73%, and 68%, respectively.

With respect to the communication between the teams, teachers at School A, B, and C rated it ineffective (0–4) at 40%, 0%, and 21%, respectively. Mixed ratings (5–6) were given at 30%, 9%, and 11%, respectively, and effective ratings (7–10) were given at 30%, 91%, and 68%, respectively. School B, which is the furthest along in implementation, with consistent leadership over 4 years, continues to have more congruence between administrator views and teacher views. School A and C are in Year 2 of implementation, with School A stating they have only truly had 1 year of implementation and six meetings at the point of this data collection. This suggests that School A and C are still establishing their teams and working on the flow of communication between their teams.

**Qualitative Survey Findings.** A leader's ability to address some of the barriers that are unique to CR at the high school level was an area where survey respondents provided elaboration. One teacher (R31) stated:

Using staff meeting time every month for CR is a benefit. More Collaboration days or time every week where teachers can meet (and as an admin., I take over the students in assembly or something like that) to make sure the meetings happen often enough.

In response to the barriers section of the survey, respondents had an opportunity to elaborate on what impeded CR implementation. One survey respondent (R36) offered: “Leadership and their belief in the CR process contributes to barriers. Administrator’s abilities to timetable schedule flexible time for CR process.” A leader’s ability to timetable, schedule, and believe in the CR process were listed among survey participants to be areas they felt that leadership was vital.

**Qualitative Interview Findings.** In one-to-one interviews, specific questions were asked of CR leads in each district to understand how long CR has been part of the district and how long site leaders have been involved with the schools in this study. It is noteworthy that School A is in Year 3 of implementation, with the administrator in place for 2 years, and that 41 of the 58 participants had less than 5 years of experience in CR. School B is in Year 5 of CR implementation and had consistent leadership for 4 years of CR implementation. School C is in Year 5 of implementation and has had two leadership changes over the last 3 years.

Leadership was mentioned in most responses (eight related interview responses) relating to Questions 1, 6, and 8 as an important factor in CR to influence important school outcomes, like high school graduation. Table 19 shows the journey of leadership for all three schools in the study and helps in understanding how the years the leader is in the school has an influence on the implementation of CR, as well as important

educational outcomes for students. In Interview Question 1, participants were asked to elaborate on their role in CR, and prompted to answer how long they had served their current school. This service does not include the 2022–2023 school year, as the study was conducted in September, and CR meetings had not started for the year.

**Table 19**

*Interviewee Principal Leadership Years Involved With School and CR Training*

Years of leadership at school	Years at current school	Years of CR training total
School A	2	5
School B	4	7
School C	2	5

*Note.* CR = Collaborative Response.

Table 20 lists the graduation rates for each school as obtained from data collected for Interview Questions 1 (role in CR), 6 (influence on graduation), and 8 (influence on attendance, academics, relationships, and graduation). Responses were further explored through member checking of the implementation journey and demographic information linked to years involved with CR and with leadership at current school. This table does not suggest a causal relationship between graduation rates and CR implementation. Many factors contribute to a student’s success at graduating from high school.

**Table 20***Graduation Rates for Each School*

Year	School A (%)	School B (%)	School C (%)
2020	98	100	85
2021	98	100	85
2022	98	100	90

*Note.* School A student population = 480; School B student population = 492; School C student population = 640.

**Leadership.** In one-to-one interviews, participants supported that the influence of leadership is key to having success with CR, which in turn supports positive influences on the important educational outcome of high school graduation. One participant (Sherri) stated that leadership is vital to CR success and spoke to the importance of engaging many stakeholders to support high school graduation:

We have several students that we have implemented CR through case consult meetings to put plans in place to support students. We have also used a collaborative team approach to set up monthly meetings with admin, counselors, mental health capacity building, division office, resource officer, to not only discuss our most difficult students but to put a broader plan in place to support all our students in different areas, mainly mental health. This was a great accomplishment for our school and would not have occurred without strong leadership that had a good grasp on CR procedures. CRs allow for early intervention and for us to work better as a team to support students as they work towards graduation. It allows us time to really invest in a student as a school when



we have time to sit and to collaborate and brainstorm what works and what doesn't.

Further, as stated by another participant (Chris), a leader is key to ensuring that CR is offered with fidelity:

The principals are the key organizers involved in running a meeting and need to clearly establish roles and expectations for these meetings. This structure is essential to the success of these meetings. An organized leader equals well-run meeting and discussions. Staff won't buy in if the leaders don't buy in.

Celebrations are essential as this serves as a key step to show progress has been made.

Finally, one participant (Brandon) noted the importance of the leader's role in CR as an instructional leader:

So, the needs of professional response or professional learning come out of that need that has arisen through the collaborative team meetings, your Collaborative Response work in your SSTs, whatever it is, this issue is coming up repeatedly. And it seems like there's lots of teachers struggling in this area. As a principal, you are an instructional leader, you would say, oh, man, I need to get behind this and I need to provide professional learning to support educators. Because the idea is we want to go deeper with instructional practice, just not recycle old ineffective strategies. Let's go deeper in our practice. And I think that's the piece behind the Collaborative Response is as you fine-tune your key issues, you have that ability to go deeper in the learning to connect professional development to it. Then you

will start seeing more shifts across your school across the division. Leaders work with teachers, in non-evaluative ways that helps teachers to grow.

**Succession.** As indicated by Brandon, school leadership is involved in training and supporting staff to facilitate meetings, follow the procedures, and become trained in the guidelines imperative to CR success. When asked what was next on their journey, they captured the desire to build capacity and grow more and provide succession planning for CR:

This year, we're going to team administrators with one another across schools. They can watch each other's recordings and then be a part of each other's debriefs. You're doing some more learning this way and I'm thinking would be time for some advice. Then they're going to hear the coaching response and be a part of the debrief of another school. So, it's not feeling so personal. You can be an outsider looking in. Then we start seeing helping people, develop their own lens around what does it look like through somebody else's eyes. Again, it just helps to develop leaders to have an instructional focus in terms of collaboration.

### ***CR Positively Influences Educational Outcomes***

Graduation, belonging, academics, and achievement are outcomes that staff perceived CR to positively influence. Despite many challenges in rural high school settings, the results of this study suggest that CR is perceived by participants to positively contribute to important outcomes for students.

**Quantitative Survey Findings.** Participants were asked in Survey Question ET1 to rate the influence they felt CR had on the important school outcomes of attendance, belonging, achievement, and high school graduation from 0 = *not at all effective* to 10 =

*very effective*. Scores from 0–4 are categorized as “not effective,” scores from 5–6 are categorized as “mixed,” and scores from 7–10 are categorized as “effective.” As observed in Table 21, attendance rated the lowest with a median response of 6.5, and two participants in response to Survey Question ET6 stated that attendance has been impacted by online opportunities that students have grown accustomed to accessing. The ratings for influence of CR on belonging, achievement, and graduation fell into three categories of not effective, mixed, and effective. For belonging, 16% indicated a rating of 0–4, 29% of participants selected a rating of 5–6, and 55% of participants selected a rating of 7–10. Achievement had 12% indicating a rating of not 0–4, 34% of participants selecting a rating of 5–6, and 54% of participants selected a rating of 7–10. Finally, graduation had the highest ratings, with 43% of participants selecting a rating of 5–6, and 61% of participants selecting a rating of 7–10, and 8% indicating a rating of 0–4.

**Table 21**

*Survey Participants’ Perceptions of CR Influence on Outcomes*

Outcome	<i>n</i>	<i>M</i>	<i>SD</i>	Median	CR influence		
					Not effective (%)	Mixed (%)	Effective (%)
Graduation	54	6.85	2.27	8	15	43	61
Belonging	56	6.66	2.04	7	16	29	55
Achievement	56	6.57	1.91	7	12	34	54
Attendance	54	6.09	2.30	6.5	24	26	52

*Note.* *N* = 58. CR = Collaborative Response. Scores could range from 0 = *not at all*

*effective* to 10 = *very effective*. Scores from 0–4 are categorized as “not effective,” scores from 5–6 are categorized as “mixed,” and scores from 7–10 are categorized as “effective.”

Graduation, belonging, and achievement reflected CR to be effective at 61%, 55% and 54% respectively, and moderately effective with 5–6 ratings at 43%, 29%, and 34%. This leaves 15%, 16%, and 12% of participants who rate CR as ineffective to influence these outcomes. Attendance is discussed in isolation due to the myriad of comments that addressed how COVID-19 allowed students to attend school online, or in hybrid models, and that some students have had challenges coming back to in person learning, however, have been able to keep up with their studies. CR's influence on attendance was the lowest rating with 52% stating it was effective, 26% moderately effective, and 24% stating it was ineffective.

**Qualitative Survey Findings.** When asked to elaborate on their ratings of the influence of CR involvement on attendance, belonging, achievement, and graduation, most respondents provided rationale for their ratings on the effectiveness of teams. However, some (three) stressed that CR alone does not lend to the success of any one of these outcomes. They listed strategic timetabling, career counseling services, extra option classes for students, and school-specific initiatives as important factors that influence positive educational outcomes.

**Graduation.** One teacher respondent (R41) considered CR as a contributing factor in high school graduation:

Our current data would suggest that we have a lot of success in this area. I feel that CR is one thing that may have helped this success but not the only contributing factor. Strategic timetabling, career counselling services, extra option classes for students, school initiatives have all had an impact on our graduation rates. We certainly have strategized in our CTM and SST groups about the themes

and initiatives that will improve student outcomes. We have become more intentional with our data and early warning indicators with the tracking, flagging, documenting, and action items placed on teams.

***Belonging.*** An administrator (R11) commented on the survey about making connections with students:

One of my students was struggling to pass his classes. As a team we discussed what issues this student was facing and also brought up other students who were struggling. As a CR team we worked together to help these students home in on their interests and skills in order to pass classes. We also worked together as a team to make connections with these students -- and really all students, more often.

***Achievement.*** A teacher participant (R58) stated that supporting student achievement was becoming more difficult, and noted that a lack of support was a barrier to CR implementation:

There is a great lack of support in the school system. Unfortunately, there is not enough time in a day or class for me to be able to accommodate everyone's needs. For example, I cannot sit and dictate to a student for 10 minutes in a 75-minute class with 25 students. I try to combat this by making myself available outside of class. Common time to meet with stakeholders is sometimes a barrier as often there is not enough time. I try to fix this by contacting those stakeholders myself and maintaining constant communication.

*Attendance.* One administrator respondent (R43) elaborated on how attendance was a difficult outcome to evaluate because students had become accustomed to accessing several alternate supports during the COVID-19 pandemic:

Since Covid, students learned that they could attend school in different ways (like google classroom) and have come to depend on the hybrid model of online and in person learning, this is negatively impacting student attendance. The students do not view their attendance as being bad, because they are keeping up with their work and prefer to learn online.

The findings across data analysis showed that the work in CR is perceived to be valuable in improving student outcomes. The perception is there is not enough time or resources to support the needs is a steady finding in this study.

**Qualitative Interview Findings.** Survey respondents rated CR as having positive impacts on student outcomes. In the interviews, these influences were brought forth in more detail. Interview data supported these findings.

*Graduation.* Chris indicated how CR has helped students to succeed, and the importance of the collaboration to get students to graduate from high school:

CR or the SST are helpful when those kids who struggle are flagged. Now, instead of just one or two teachers with eyes on and worries for the student to graduate, the whole team can circle around and provide that foundational support. So, for example, the equity coordinator is working with our Indigenous students and is helping them graduate. Well, some of those kids are on the FSLW [family school liaison worker] caseload, or even our ELL [English-language learner] kids, the district lead will get involved. So, it's not just one or two teachers saying,

“Hey, my student is struggling,” it’s the team is going to wrap support around the student or key issue, right, and get them to the finish line.

A teacher participant (Rose), in response to Interview Question 8, indicated how CR led to student success, despite barriers of attendance, learning difficulties, and mental health stressors:

BMW is a Grade 12 student that I believe would not be graduating, at least not here, if it weren’t for the success she was able to experience when CR teams helped her to feel supported and like she was being heard. Everything from learning difficulties, poor attendance due to lack of mental/emotional coping skills in her past like cutting, to insecurity of fluctuation of home/school location, to dissolution of her family unit ... compounded by having a few of her friends’ transfer to different school ... all contributed to a natural fallout. This success didn’t just happen. I believe the CR process contributed to this success. Several of our schools have students who are at risk of not getting enough credits to graduate as a standing item on their CR agendas. This ensures that these students are constantly being addressed.

Finally, Veronica stated the importance of key stakeholders collaborating to support the students on the bubble, and at-risk of meeting the important outcome of graduation:

Each counselor rotates to the different team meetings. We try to meet all at the same time, same day, which is four teams here. So, the counselor would rotate to each of the different meetings just to see if the team needed anything or some kind of advice. So, with graduation there was a lot of communication between our

support team and our teachers, especially those that are on the bubble. But now the students at risk have been identified, they get even more support because of the Collaborative Response.

***Belonging.*** In another response to Interview Question 6, Sherri spoke about the importance of connection and belonging to the important life outcome linked to high school graduation, explaining the vast amount of work undertaken to focus on these key issues:

We have monthly teacher-led meetings and did confirm key issues from data collected from student surveys. One key issue was connection, one was a sense of belonging, one was mental wellness and suicide. We have our LGBTQ group that meets every week. We have our Student Council, which is heavily involved. They run mental wellness, spirit days throughout the year and we do special things. We have many clubs that connect kids to something in our building. We saw a little bit of a gap with our ELL [English-language learner] learners and our international students, which we have a lot of, so we put more of an emphasis on making sure they are connecting as well, and they have somebody to go to, and we're trying to connect them differently in our building this year. It all ties through to academics. As you know, when kids feel connected, they're going to do better in their academics and so on.

Further, Mark addressed an identified key issue of students who were identified as lacking a connection or feeling like they belonged at school:

I remember the one CR where we talked about kids who reported no connection to school. Personally, that CR meeting really got me thinking, because some of



students identified that they felt they did not have an adult who cared about them. It surprised me. So, now, I feel like I've become the Walmart greeter down at the end of the hallway.

***Achievement.*** Sherri noted that through CR many positive gains were made for student success:

I guess we'll speak to our focus areas. Mental wellness was a big issue that we dealt with last year. We rolled that out as teachers as little mini lessons all throughout last year on mental health. So, you know whether that was a direct correlation with more kids graduating or not, I think that any little bit helped. Also, the more times your leaders in the building talk about raising the bar and getting as many kids across the line as possible, the better. The one thing that I think I've really made clear to our staff is we don't accept 45 percents anymore. You know, if mark books are coming in and we see a kid with a 45, we're having a conversation with what more can we do to get this kid a passing grade. So, they're working a little bit harder around the bigger picture—that grades aren't a punishment anymore. We want to try to pull as many kids over that line as possible. We gave strategies on what are some things teachers can do. And as an admin team, we're committed to continue to push to make sure those standards are high.

Further, one participant (Mark) responded to the value of CR in leading to conversations about the key issue of rigor, and how the data suggested they needed to approach a strategy for improving reading skills:

I remember some CR meetings, where we talked about needing to get more rigorous and just looking at supporting academic learning. So, we reflect on what it was like last year. We discussed that kids reading skills are suffering and how we could increase reading comprehension across the board? That was my CR key issue. I was like okay this summer I need to go and start reading some books theory, you know, reading theory books, right just to see like, what can I do to then to help support this.

Kevin emphasized the importance of ongoing work with CR teams and structures and how those varied perspectives lend to student success. The configuration of meetings that is described is quite common in rural school settings:

Sharing strategies amongst teachers about what works for them, and maybe sometimes it's across grade levels to strategize. CR, or SST can work because the Grade 5 teacher who taught the kid 3 years ago, knows this about the kid or used the strategy with the kid and now that teacher can learn from that and then as well as just knowing different teachers' skill sets and how we can support students specifically with developing those skills.

Adam provided an example of how collaboration, team meetings, and leadership all combined work to improve student outcomes (belonging, academic success, and graduation), build teacher capacity, and improve the mental health of their student population:

We've collaborated with Sherri's team, we developed lessons that we put together, that was a strategy of that collaboration, and we walked students through a module on how to support their friend's mental health. We incentivized students

participating in taking the entire module independently by providing a reward at the end. Students were proud to say, “I completed this module” and received some praise. In one case this was a student that wasn’t strong academically and didn’t seem to have a ton of connection with other courses that they were working on. They didn’t have a ton of connections in the school. It was these students who had taken this module and they really needed to take it because they really needed that information for themselves and for their peer group. Then they also felt connected and safe and cared for by a school staff who was able to reach out. I think that illustrates, to me, one example of the way that sort of overall strategies and big collaborations can be kind of boiled down to the success of one student. So, anytime any of those things are met, I think that increases the likelihood of a student’s success and graduating.

Despite several challenges that schools have faced, like COVID-19, that has led to lingering mental health issues, and economic hardships, CR has had perceived positive outcomes for students.

### **Summary**

This chapter has presented findings from artifact analysis, the data analysis of the responses made by each participant to the multiple choice, rating, and open-ended survey questions and the follow-up one-to-one interviews. The questions surrounded the implementation of CR in three schools in two school divisions. The survey provided data that allowed for the development of themes, and the one-to-one interviews provided an in-depth story of each member of the SST within their own unique context. Data suggested that there was integration across several deductive themes and inductive

categories were identified. Using both deductive and inductive analysis strategies and aggregating the data from the three school populations involved in the study indicated similar observations regarding the implementation of CR.

The survey data revealed perceptions about each district's CR continuum of support, implementation factors influencing the structures and processes, and impact of the intervention on improving outcomes for students, specifically graduation. This analysis confirmed the assumption that there would be data to support that high-quality teaching and strong leadership have a high impact on student outcomes. There were thematic differences in open-ended responses, based on the supports available in each district, along with the structure and support for Collaboration Days to be implemented in timely, targeted ways that could involve the maximum number of adults needed to support the key issues arising from team meetings. Participants' survey responses typically aligned with the open-ended responses; however, the written responses provided an opportunity for unsolicited information and ideas and suggestions to emerge. Thematic coding of these open-ended questions indicated that the supports available and CR approaches are working well in both districts. An emphasis on improving the following emerged: (a) ensuring embedded CR times and timeliness of Collaboration Days, (b) having key stakeholders available to be a part of the meetings, and (c) having more mental health supports and training. Examining the results for each school implementing the same intervention and then observing the pattern of results across the schools provided a stronger analysis and provides the basis for further discussion in Chapter 5.

## Chapter 5: Discussion

This instrumental case study was designed to investigate how CR SSTs perceive their work in keeping students on track to obtain their high school diploma. I chose this study because of my ongoing desire to understand how public-school districts might address the students who are most at risk of not completing high school, and to understand how CR as an intervention influences the phenomenon of high school dropout. The discussion for this chapter focuses on the supports available to students in rural communities to assist them in staying on track to obtain their high school diplomas (RQ1), implementation of CR as staff engage in supporting at-risk youth (RQ2), and perceived outcomes (including barriers) that SST members observe from their work in keeping students on track to obtain their high school diploma (RQ3). I bring together survey and interview data to respond to the research questions.

It is important to consider how CR is implemented in rural schools because the implications require astute consideration for implementers of this approach. The supports that matter the most to stakeholders are also vital for consideration, and most importantly, the ways that CR influences student outcomes requires thoughtful data-driven analysis. Grounded in Bronfenbrenner's (1979) Ecological Systems Model, the purpose of this instrumental study (Stake, 2013) was to discover how SSTs influence positive outcomes for at-risk learners. I provide an overview of the context and methodology for this study, along with a summary of my key findings related to CR implementation in two rural districts and their orientation to the literature and expert audit review. Next, I examine both practice and research implications. I also address the limitations of the study, make recommendations for further research, and offer conclusions related to the study.

The research questions for this study are as follows:

- RQ1:** What are the collaborative student supports available to students in rural communities to assist them in staying on track to obtain their high school diplomas?
- RQ2:** How do SSTs describe their implementation of CR as they engage in supporting at-risk students?
- RQ3:** What are the perceived outcomes that SST members observe from their work in keeping students on track to achieve their high school diploma?

Data were collected through a collection of artifacts detailing the supports available in two school districts (see Appendix F) as well as through the administration of a survey to determine participants' perceptions of the effectiveness of CR in influencing educational outcomes. Quantitative and qualitative data were gathered through the survey. One-to-one interviews with teachers, administrators and district office staff offered a more detailed exploration of participants' survey responses and topics deemed relevant from the literature review. The 11 interview participants were chosen based on their willingness to be interviewed, as well as their experience level with CR. As described in Chapter 4, the survey and interview data yielded similar themes.

As outlined in Chapter 2, it is evident from the literature review that high-quality teaching, strong leadership, tiered-level interventions, and ongoing professional learning influences positive student outcomes (attendance, belonging, academics, and graduation). The study's conceptual framework brings together the CR tiered-level approach (Hewson & Hewson, 2022) and Bronfenbrenner's (1979) Ecological Systems Model. Bronfenbrenner's model explores the circles of influence in a child's development and

how the ecology of a child (family, peers, school community) can either foster growth or fuel problems. Interventions within a school's continuum of support (tiered-level responses) need to reflect this reality (Brendtro et al., 2019). The literature focused on the importance of risk factors and early intervention to increase the chance of preventing early school leaving (Balfanz et al., 2007; Legster & Balfanz, 2010; Stanley & Plucker, 2008; Uppal, 2017).

Through this study I wished to gain insight into the issue of school interventions to support students in obtaining their high school diploma. Participants guided me to understand the phenomenon of high school dropout and the complexity of SST approaches to address this phenomenon. I examined SST structures and gained insights on the phenomenon of how these approaches impact high school graduation. The rationale for using an instrumental case study for this research is linked to the purpose of the study: to explore the impact that CR teams and SSTs have on assisting students to graduate from high school. While the tiered-level supports involved in the CR approach can be linked to Bronfenbrenner's (1979) Ecological System Model, it is important that participants of the CR teams and SSTs know which processes and practices allow for healthy and efficient team function, that in turn will benefit students. The function of the CR approach in rural contexts is an important focus of this study. Thus, the results from this case study can be used to identify key processes and practices that school and system leaders can employ for a successful CR implementation, in rural settings, to support students to graduate from high school.

The two school districts that served as the case for this study were chosen due to their commitment to using CR. Since 2016 and 2018, respectively, the leadership teams

have been working with schools and leaders to refine the continuum of support available to students across the divisions. The division leads offered individual support to school teams and reviewed the implementation of CR by having a team from Jigsaw Learning visit school sites, observe team meetings in person or via video recordings, and attend professional learning sessions to offer insights as well as respond to questions. Jigsaw Learning was cofounded by Kurtis and Lorna Hewson, the codevelopers of the CR approach, to share their CR work and support schools in their implementation of the approach. Jigsaw Learning is a resource available for CR implementation. This platform provides an online connection for teachers, leaders, and implementers of CR to access support, network with other districts, and access resources that will support their work (<http://jigsawlearning.ca>).

The research provided an analysis of the survey data and school demographics, both district's continuum of supports to assist with CR, and the 11 one-to-one interviews of teachers, administrators, directors, and counselors who volunteered to provide further information about CR implementation. As mentioned, it is evident from the literature that tiered interventions have a positive influence on important educational outcomes, and that high schools pose unique challenges in the implementation of these leveled interventions (Hattie et al., 2016, as cited in Donohoo & Katz, 2017; Fuchs et al., 2010; Nilvius, 2020). It was my expectation that tiered interventions would have a positive influence on student outcomes, my study intended to learn how the specific intervention of CR, in rural high school settings, compared to the literature on the challenges that are unique to high school settings in supporting tiered intervention approaches.



## **Discussion**

This study shows that school districts that have implemented CR identify key areas of importance that are unique in rural high school settings. The continuum of supports that each division has in place (see Appendix F) relate to the areas of need outlined in Bronfenbrenner's (1979) Ecological System's Model and the tiered supports that CR teams identify as addressing key issues that students face. Findings are aligned with other research surrounding tiered interventions and the ensuing considerations at the secondary school level. The three primary data sources were triangulated to validate and corroborate individual findings and provide a detailed description of the effects of the CR implementation central to this case study.

The supports that are available and the supports that are needed for CR to be perceived as successful are related to Research Question 1. In Chapter 4, RQ1 revealed that teachers perceive their access to Tier 1 support as high (86%) and Tier 2 support as high at (69%), the perceived access to Tier 3 and Tier 4 supports drops for teachers at 33% and 31% respectively (see Figure 7). This emphasized what the research states about high school access to needed supports (Sansosti et al., 2010).

### ***Findings Related to Available Student Supports (RQ1)***

Results of this study helped to identify various supports those participants using CR believe are needed for success. Inductive and deductive analysis identified two themes that relate to supports available and supports that can be accessed in CR implementation. From the analysis of the survey and interview data sets, the following themes related to supports were derived: (a) available supports; and (b) access to supports.

The supports available in each district were analyzed once district leads of CR provided the artifact (see Appendix F) to outline the levels of support available for each tier of intervention. The two districts have utilized the four-tier model, outlined in Figure 2. The key differences between each district's interventions are as follows: District 1 still has learning coaches and utilizes student assistants, and District 2 does not have learning coaches, and at the time of the study had not factored in time for educational assistants to be included in the dedicated collaboration days. Another key distinction was that District 1 had guidance counselors staffed in their high schools, while District 2 had two career counselors shared among all the high schools in the district, and across a large geographical area.

Both districts followed the four-tier continuum of supports and this aligns with the literature on CR supports. The literature supported a four-tier intervention approach (Hewson & Hewson, 2022). CR is unique from other tiered-intervention approaches in the continuum of supports, with the universal tier separated into two parts. This distinction of having four tiers in supporting students and staff to hold collaborative conversations that evolve as they relate to instruction, as well as engage in ongoing capacity building, was a finding from Research Question 3.

The continuum of support is meant to be in draft, malleable form, so that supports, resources, and personnel can adapt to the key issues that students face throughout their school life. This aligns with the literature on human development. The supports needed for students can consider student needs in their social, environmental, and biological development, and Bronfenbrenner's (1979) Ecological Systems Model grounds the continuum of supports that guides my research. This interrelated approach of

identifying the ecology of a student, and the interventions needed to support domains of difficulty, helped me to identify how the findings of my study related to the literature review. One powerful example, from this study, was how District 2 adapted their supports to include educational assistants to be included in CR days for the second semester. At the time of the study, due to budgetary constraints, one district did not include educational assistants in their collaboration days. As of December 15, 2022, that division has reinstated educational assistants as part of at least a few collaboration days for the last half of the school year. This was an important support mentioned by participants across all data collection and analysis.

Participants identified that access to Tier 3 and Tier 4 resources were strained, and limited by staffing, resources, and geographical realities. The resource most difficult to access and mentioned most often by participants was that mental health practitioners and educational assistants. These two key stakeholders were deemed vital for CR success. Across quantitative survey data (54 mental health related participant ratings) and qualitative survey data with mental health having (12 related participant survey responses), and educational assistants having (eight related survey responses) as well as in interview data for the need for educational assistants or student assistants with (44 related responses). Data collected and analyzed showed that participants expressed how vital mental health practitioners were in CR (31 related interview responses). Rural secondary school in Northern Alberta struggle to implement all four tiers due to staffing, resources, geographical challenges, staff retention, and budgetary restrictions. Rural districts require thought and strategic planning to address the Tier 3 and Tier 4 realities that rural schools face. As cited in the research, forcing at-risk high school learners

through Tier 1 and 2 before offering intensive supports wastes valuable time and causes undue stress for learners (Fuchs et al., 2012).

***Findings Related to the Effectiveness of CR Processes and Structures (RQ2)***

Results of the analysis of Research Question 2 helped to identify how SSTs describe their implementation of CR as they engage in supporting at-risk students. Analysis of the data resulted in inductive and deductive coding that helped to derive themes that related to the effectiveness of the teams in CR, the structures and process in CR, and the guidelines in CR that are deemed important for successful implementation. The themes related to supports include (a) Structures play a key role in CR, and (b) Layering of teams increases CR success. Implementation is critical to having the tiers of support function appropriately, and participants relayed that the variables of time, structures, key stakeholders, protocols, and the continuum of support in place all contribute to CR success.

**Structures Play a Key Role in CR.** The importance of structure and key guidelines was supported across interviews, surveys, and open-ended survey explanations of responses. The findings of this study showed that the key guidelines of CR were rated as highly important by participants, with only two ratings of importance falling below 80%. As stated by one survey respondent (R22) in relation to Question ET6:

When CR follows the group guidelines, everyone is working together on the same page with a clear focus. The time becomes purposeful which guides the time spent together with colleagues. Without the norms and jobs, talking about students can end up being a vent session which does nothing to further success for all in the school.

The literature review revealed that the structures in CR hold teachers accountable to focus on key issues and support teacher growth by increasing their tools and strategies to support students. In the analysis of survey and interview data, the importance of the structures aligns with the literature surrounding CR, as well as other tiered interventions (Hewson & Hewson, 2022; Johnson et al., 2010). Further, in an expert audit review, K. Hewson and L. Hewson (personal communication, December 23, 2022) discussed the structures:

It's often in high schools that teachers either question or reject some of the structural components like assigning roles, like articulating norms, time keeping. It feels like we're boxed and when we put a timer on it, it limits our creativity. And we would say try it because we can virtually guarantee that in time, the efficiency of the conversation will continue to help with creatively solving key issues and we don't have to spend time being frustrated with this person who's not respecting what I think is important, or the flow of a meeting.

For this study, the stakeholder involvement that was stressed was educational assistants and family school liaison workers or family outreach workers. When asked what supports are most important (S1–S4, B1–B6; see Appendix B), participants identified that embedded time to collaborate was the most important support for CR to be effective. The embedded time to collaborate theme encompasses the following categories: embedded time, district office calendars, creative scheduling, and roles in CR.

***Embedded Time.*** Having CR meetings in timely ways is critical in addressing the needs of at-risk learners that require intervention. This sentiment was captured in 70 related comments made by participants. High schools are limited to a short period of time

to get students to meet their educational goals, and the key one as prefaced in this study is to obtain their high school diploma. Due to this short time period to address the key issues students are facing, participants made it known that they require more time and access to key stakeholders during that time to collaborate. Participants stated that it is imperative that CR implementation occur in timely ways, and for implementors to be creative in carving out the time required for meeting. Equally important, is to ensure that data is being utilized to determine who is at risk, and begin the process of meeting to promote strategies, and suggest implementation of an approach to tackle the issue promptly. Further, the length of time and exposure to CR helps with implementation and readiness for leaders to get creative, as their systems and process are running smoothly and efficiently. The staff well versed in CR, over time, can become facilitators, allowing the leaders to rotate between teams to offer support. This succession planning also allows leaders to embed collaboration time more frequently, because they have other facilitators who can step in while they arrange coverage for students and freeing teachers to have frequent CTMs.

One distinction with respondents was that some leaders planned strategically to create the embedded time, while others were looking to have some other force create the embedded time for them. With the complexities of rural school budgets, access to specialist support, and challenges of scheduling in high school settings, this approach to finding ways to embed collaboration time is essential for CR success. It is not an option to wait for the magic wand of someone else to come and solve this challenge. This finding is consistent with research on finding the time for collaboration in secondary settings (Rinck, 2018; Splett et al., 2018).

The research supports that there are challenges to implementing tiered responses in high school settings. The issue of finding the time to collaborate in high schools was addressed in the review of the literature (Fuchs et al., 2010; Nilvius, 2020). Tiered interventions, like CR, can be successful to promote inclusive education when attention is paid to embedding the time, including the appropriate stakeholders, utilizing their network of supports, and meeting in timely and uninterrupted ways. When a district systemically implements CR, the dedication to providing calendar days for staff to meet is vital.

***Creative Scheduling for Networking.*** The structure of CR allowed participants to create networks of support that continue to help them, close to their practice, and allow them to support students in very complex times. Participants in this study relayed the importance of having scheduled time, with varied perspectives of stakeholders, that allows them to support one another in their practice. The response from (R48) in the survey analysis described how having access to Dossier, a software tool for tracking data, key issues, action plans, and strategies tried was incredibly important for high school practitioners. Since finding the time to meet in high school settings is more problematic than elementary settings, having this online tool where teachers and leaders can continually update and track the implementation of strategies to support students who struggle is very important. Further, many leaders were creative in finding ways to meet more regularly than the allotted days provided on district calendars, by using staff meeting time, covering assemblies to free teachers to meet, and offering early morning meetings once a week to ensure teachers, and leaders could network with their colleagues

in timely ways. The difficult task, as evidenced in this study, was having access to the Tier 3 and Tier 4 practitioners for collaboration at these meetings.

This ongoing networking was supported in the literature as a critical factor in improving the capacity of teachers to support students who struggle in school (Hammond, 2014; Snook et al., 2009). This supports the argument for continuing with ongoing professional learning and having a network of support throughout a teacher's career (Nilvius, 2020). Collaborative networking gives schools the opportunity to support all students, including those without a diagnosis, through a layered system of intervention. Moreover, research supports that networking needs to be fluid and very close to teacher practice to be effective (Hammond, 2014; Hewson & Hewson, 2022, Snook et al., 2009). This supports why participants stressed the importance of having more regular CR meetings, and not rely solely on those days that are provided by district office calendar days for collaboration.

***Roles in CR.*** A key finding with the roles in CR was the importance of how they guided conversations to become more action oriented and less about lamenting and complaining about specific students. Having timekeepers, recorders, facilitators, interrupters, and cheerleaders were addressed by participants, although they did not always use the exact terms outlined in CR, to be important to have meetings stay focused and on track. Participants also perceived that not all roles needed to be reviewed, as they knew which staff members would function in each role. This was possible when the school was far enough along in their implementation journey. Implementers must be cautious with this, as when issues arise in high schools using CR, it can often be linked to



one or more of the key guidelines, procedures, or roles not being honored (K. Hewson & L. Hewson, personal communication, December 23, 2022).

**Layering of Teams Increases CR Success.** Participants from all three schools indicated that they were at the stage of implementation where the CTMs were functioning well (see Table 15). The participants indicated that CTMs had been successful in their CR implementation, however participants rated SST to be less effective with only 23% rating it a great success. Since SST often relies on personnel outside of the school for support, this aligns with the findings on access to Tier 3 and Tier 4 supports found in Research Question 1. In this case study, when asked what supports are available (Survey Questions S1–S4 and B1–B3; see Appendix B), participants identified that key stakeholders are critical for CR to be effective. The structures in CR ensure that everyone’s voice is heard and that the appropriate stakeholders are involved in the discussions surrounding key issues. The following categories were derived from analysis of the data from the survey and one-to-one interviews: CTM, SST, and Communication.

***CTM and SST.*** The effectiveness of SST was rated as effective by 63% of participants, who are mostly teachers. This speaks to the need for teams to communicate their work, strategies, and interventions with every layer of team involved in CR. The effectiveness of the effectiveness of CTM and SST can be linked to the year of implementation of CR, or the amount of time the leader has been in the school leading CR. One important finding listed how rural schools, with the configurations including younger than high school age students, reflected positive outcomes in having more adults to draw on to find ways to connect. The need to continually work to find ways for staff to

work collaboratively is well documented in the literature education (Darling-Hammond et al., 2017; Hammond, 2014; Katz, 2018).

***Communication.*** In all three schools, improving the communication between CTM and SST members was both identified as a need and indicated to be the next step in the CR journey. The survey data and the interview data support that this is an area that requires focus. Improved communication would have an important impact on the way teachers view their access to Tier 3 and Tier 4 supports, as they would be more informed about what SST members are identifying, implementing, and collaborating on with the stakeholders who support Tier 3 and Tier 4 interventions.

The distinction between this administrator views and teacher perception of how effective CTM and SST were functioning was found in other areas of this study, and speaks to the importance of each level of team meeting to clearly communicate with other teams about what they are doing. Administrators are typically involved with SST and rated their success as higher. This is linked to teacher comments that they do not always know what SST are doing, and therefore do not know what strategies have been implemented, or what goals have been achieved. Schools that are further in their implementation have been able to curtail some of these communication issues by using the Dossier software that helps with communicating, tracking, and celebrating interventions for students who struggle, and that all staff can access.

Data collected and analyzed for Research Question 2 revealed critical information for CR implementation in secondary settings. Although questions on effectiveness revealed CR's influence on educational outcomes, Research Question 3 focused on outcomes.

### *Findings for SST Outcomes (RQ3)*

Research Question 3 revealed the following themes, and some barriers, that are vital to consider for CR implementation in high school settings. The perceived outcomes that SST members observe from their work in keeping students on track to achieve their high school diplomas were captured in three themes: CR improves teaching practice, leadership plays a key role in CR success, and CR positively influences educational outcomes.

**CR Improves Teaching Practice.** The structures and procedures of the CR approach are meant to provide function to the team. Lencioni (2002) provided the five dysfunctions of a team: absence of trust, fear of conflict, lack of commitment, avoidance of accountability, and inattention to results. CR's system and approach offer an antidote to team dysfunction by creating environments of trust, creating conditions for healthy conflict, increasing collective efficacy, holding staff accountable, and focusing on the data and results involved with every intervention (Hewson & Hewson, 2022). A teacher's collective efficacy, which has an effect size of 1.57, is an important focus in the CR approach. This is well supported in the literature, and it is well documented across qualitative and quantitative studies that teacher quality is the single most accurate indicator of students' academic success (Hattie et al., 2016, as cited in Donohoo & Katz, 2017; Fullan et al., 2017). Overall, research has solidified recent trends in education regarding combining high-quality teachers, using collaborative approaches, with high-need students (Imbeau & Tomlinson, 2010). When teams of committed people can do a few simple things with automaticity, it allows for higher order thinking, which is needed to tackle complex problems. Successful teams know that they must have trust and be

vulnerable (Brown, 2015; Hewson & Hewson, 2022) to improve their practice, and that team members must hold one another accountable to ensure that they stay committed to their goals. One interviewee (Brandon) spoke to this factor:

Because the idea is we want to go deeper with instructional practice and not recycle old tried and failed approaches, like to hook them up with a buddy. That's great, but let's go deeper in our practice. And that's the piece behind CR—as you fine-tune and get good at the processes, you have that ability to go deeper, to go deeper in the learning to connect professional learning to it. Then you will start seeing more shifts across your school across the division.

**CR Encourages Distributed Leadership.** The structures and processes of CR are of high importance to participants as they are collaborating to improve student outcomes and teacher practice. Participants spoke about the importance of these structures that created environments of trust that allow teachers and leaders to grow in their practice as equals. Participants relayed the importance of strong leaders, who believed in CR, were vital to the success of their collaborative efforts.

The schools involved in this study were at different stages of implementation. The leaders of each school discussed how it was vital they model and lead the meetings to ensure they functioned with fidelity. School B was able to have other members of their CR team lead meetings, due to being in their fourth year of implementation and having provided opportunities to build the capacity of others to lead over a longer period.

Figure 10 from the quantitative survey analysis showed that the views of administrators differ from teachers, and notably with schools that are in the earlier stages of CR implementation. This finding supports that communication across teams, as

supported in the literature, continues to be a barrier in high school settings (Nilvius, 2020). As leaders continue to grow in their knowledge and implementation with their CR teams, the more the flow of communication will likely occur. School B had higher congruity between administrators and teachers, which can suggest that they have achieved a flow in their teams functioning with fidelity. This takes time, consistency, and adherence to the processes and procedures integral to CR function.

The importance of consistent leadership, to allow leaders to build capacity within their schools, is an important consideration for CR implementation, and the literature review supported that leadership is vital to a school's change process and to the creation of the conditions that promote the moral commitment of school teams (Kotter, 2008; Sergiovanni, 1998). CR has a goal of supporting marginalized students in the most inclusive manner possible, and the research supports that leadership has the responsibility to promote peace, acceptance, and respect for the diversity present in school systems (Hammond, 2014; Katz, 2012, 2018). In rural high schools, where resources are perceived to be lacking, a distributed approach in supporting diverse learners is vital. CR provides a framework that allows for teachers to become leaders within the approach. This is supported in the literature to ensure that teachers are empowered to become change agents. Further, leadership is strengthened when leaders provide opportunities for distributed leadership, have the ability to communicate the value of implementation through data-driven approaches along with evidence, and celebrate teachers as change agents in moving the school on the path to success (Fullan et al, 2017; Pollock et al., 2015).

**CR Positively Influences Educational Outcomes.** Participants revealed how CR influenced educational outcomes of graduation, belonging, achievement, and attendance. The findings across data analysis showed that the work in CR is perceived to be valuable in improving student outcomes. The consistent finding that there is not enough time or resources to support the needs is a steady finding in this study. Despite several challenges that schools have faced, like COVID-19, that has led to lingering mental health issues, and economic hardships, CR has had perceived positive outcomes for students.

CR has a framework that sets it apart by explicitly connecting the complex work of supporting all students through powerful and purposeful structures that lead to high levels of collective efficacy (Hewson & Hewson, 2022). Collective efficacy is the number one factor for improving student achievement (Hattie et al., 2016, as cited in Donohoo & Katz, 2017). CR is distinguished by the intentional delineation between “tiering supports for students” and “tiering students.” This shifts the responsibility or “blame” from the student to the system, which has a great impact on an individual who is failing to thrive in school (Hewson & Hewson, 2022; Shields, 2018). Participants expressed how CR shifted the conversations from lamenting about a few students, to acting on several students.

When schools shift the onus of responsibility back onto the system, as was stated by survey respondents and interview participants, it offers the teachers an opportunity to help build the belief that all students can learn and succeed in school. This belief in a student’s ability, that is a collective commitment and byproduct of the CR meetings, is an example of focusing on the right driver. The literature revealed that the effect size of a teacher’s belief in a student’s ability is 1.62, and as revealed by participants the processes

and structures of CR can improve educational outcomes for students (Hattie & Clarke, 2018). The CR structures and processes become automatic over time, the consistency in the approaches for meetings, with norms and roles, allows for teachers to continually build their capacity and strategize on new ways to support student need. When teams of committed people can do a few simple things with automaticity, it allows for higher order thinking which is needed to tackle complex problems. Even with imperfect implementations, or new implementation realities, participants are seeing positive outcomes for students. This indicates that it is worth supporting, and persisting with improving the implementation of CR.

### **Implications for Collaborative Response Implementation**

In this study, many factors were identified as contributing to CR implementation and are thus considered to be important elements for CR implementors to consider.

**Implication 1:** Ensure that educational assistants and student assistants are involved in CR processes. When participants spoke about the supports needed for CR implementation, they were adamant that educational assistants have an important role to play in CTMs and in the resulting supports established for students. These staff members often work closely with students daily and can offer a different perspective on student strengths and needs that adds another level of understanding to the discussion. This aligns with the literature that posits that recognizing support staff as valuable voices around the table positively affects their efficacy in the school and increases their commitment to doing all they can to support all students, not just those they have the most contact with or are assigned to (Hewson & Hewson, 2022).

**Implication 2:** Find the resources for mental health professionals and counselors to support schools on a more full-time basis. In this study, when two support staff (serving Tier 3 and Tier 4 interventions), who used data to promote action, were able to improve teacher capacity to support students more universally. This provided one incredibly powerful CR approach to consider in high schools. Mental health training was an area in which participants clearly stated they needed more support and training. If all schools could emulate this type of capacity building, they would be much more likely to support more students who are struggling with their mental health, in universal ways and with those staff with whom students have relationships. This also helps with an issue unique to high schools, that students need to earn credits to graduate, and in this school's approach to supporting mental health, the students got the support they needed emotionally and earned credits that are needed to graduate from high school. Mental health issues were reported in the literature to be alterable risk factors to address to support high school graduation (Duke, 2020; Porshe et al., 2011; Uppal, 2017)

**Implication 3:** Don't wait for the perfect assessment tool to start intervening when students struggle. As it relates to data and evidence, CR provides the processes and structures for staff to start conversations earlier than they traditionally begin within schools. There are mechanisms to pull attendance data, as one example of a key issue, and color code students based on risk factors. This brings the key issue into conversations and allows teams to focus on the kids who are teetering. This early response catches students while they are flagged yellow, before they go from being flagged yellow to red. This flagging by color allows for a quick way to assess risk, with yellow indicating a warning and red indicating high risk for concern. The literature review supported that



early warning is key to addressing school dropout (Bowers & Sprott, 2012). By using CR data and identifying students who are just slightly below on any key issue that staff identify as problematic for school success, teams have a structure that can support these students in achieving important school outcomes, including graduation.

**Implication 4:** In rural high implementation, a focus on cross-departmental formats needs to be established to increase the number of perspectives on an issue and stop teachers from working in silos, which can exist in high school settings. In the CTM, practitioners notice that students struggling to graduate typically have certain subjects or disciplines where they have more success. CR structures, processes, and layered meetings get teachers to interact and start the conversation around student strengths, so that teachers share approaches that can have an impact on other subject areas. When teachers share their celebration of a student's learning journey, it encourages other teachers to employ the same strategies. The research supports that "every child needs at least one adult who is irrationally crazy about him or her" (Bronfenbrenner, 1979, p. 146) and CR, though this cross-departmental format, invites more adults into the conversation to make this sentiment a reality for more students. Cross-departmental format is conducive to rural high schools, and is supported in the literature to be effective (Mellard et al., 2009).

The findings from this study indicate that although the basic principles of CR are being implemented across very similar settings, the application of CR approaches are much different. This complexity can be attributed to many variables, including the culture of the staff, developmental stages of students, leadership consistency in the school, length of CR implementation, and the short timeline that high school teams must support students to the end goal of graduations. Thus, it can be more challenging to implement

CR in high schools compared to elementary and even middle school settings. This complexity is addressed in the review of the research on tiered interventions (Duffy, 2007; Sansosti et al., 2011). This lends to the purpose of this study, to add to the research addressing how high school teams can successfully implement tiered-level interventions and, specific to this case, CR.

**Implication 5:** CR promotes a positive shift to celebrate student strengths and provide the processes and structures to move teachers into solution focused approaches. Society requires a shift from systemic structures (codes, labels, disorders) to a more inclusive strength-based approach to improving the lives of students. CR celebrations are one way of shifting the narrative from negative to positive strength-based approaches in addressing students who struggle (Hewson & Hewson, 2022). Further, researchers posit that leadership is strengthened when systems provide opportunities for distributed leadership, communicate the value of implementation through data-driven approaches along with evidence, and celebrate teachers as change agents in moving the school on the path to success (Pollock et al., 2015).

**Implication 6:** Leadership in schools requires consistency for CR implementation. I was surprised by how the implementation of CR was disrupted when leadership in the school changed, mainly because all leaders had experience in CR, however, were newer to their respective schools. In the three schools involved in this study, two school leaders had only been with their current school for 2 years, and they communicated that they had to re-establish routines, norms, and structures, lead meetings themselves, build capacity in others to lead meetings, consider team configurations, and build trust with their staff. Even though both leaders had CR experience in their past

schools, the implementation journey in their new school required a step back to the basics of CR implementation.

This change in leadership was found to have several implications for the journey of CR in their current schools. The tiering of supports, for example, was not developed in these two schools at the time of this study, whereas the school with 4 years of consistent leadership had this tiering in place. School A did develop tiered supports for students midway through the year of the study, while School C has not yet been able to achieve this goal. This is not considered to be negative, just a reality of what can be achieved given disruptions in leadership. School B was able to develop tiered supports in Year 4 of its CR implementation, so School A is ahead of that school's implementation year for placing students in the appropriate tier. The implementation journey is complex, unique, and not a linear process where every school reaches the same level at the same time. Consistent leadership to promote systemic change was cited in the research to take 5 to 10 years (Kotter, 2008).

**Implication 7:** This study affirmed that CR has an influence on improving teaching and building teacher capacity. The findings from this study relayed that through the structures and processes of the team interactions, teachers grow in their perspectives, strategies, and build their toolboxes to support more students. The CR process was described as influencing teachers to trust more, become more vulnerable in their practice, and share openly, without fear, about the areas that they are struggling. Relational trust is required among teachers and leaders to improve teaching practice (Lencioni, 2002). Further, Lencioni depicted the five dysfunctions of team as follows: absence of trust, fear of conflict, lack of commitment, avoidance of accountability, and inattention to results.

At the foundation of effective teams is trust (Lencioni, 2002; Sinek, 2014). Further, Sinek (2014) asserted that a strong safety culture cares about the product or service, about meeting standards and exceeding expectations, with concern for the well-being of others. CR, as an approach, is intentional in fostering teacher growth and providing students with consistent supports. A leader's ability to adhere to the structures and processes and foster this collaborative approach to key issues is needed in an ever complex and changing education system.

**Implication 8:** Teachers and leaders stated that they required time to network, support one another in building capacity, and sharing best practice. The research affirms that this collaboration, close to practice, is what is needed in complex system. Further, teachers cannot count on their preservice education alone to prepare them to support all of the students they will teach—this is especially true for special education students (Björn et al., 2018).

Throughout the growth, improvement, and flow of the teams involved in CR, it is imperative that school leaders recognize the need to carve out time to celebrate, share, and communicate about what each team is doing to address the key issues that are surfacing. Figure 10 from the findings about the effectiveness of teams in CR reflects the need for administrators to be deliberate about increasing the flow of communication so that all teams will become aware of their interventions, thus contributing to the collective efficacy of the group toward the common goal that all students succeed.

### **Future Research**

Studies at the secondary school level support what participants indicated about their work with CR at the high school level. This study revealed that the challenges are

like those found by Sansosti et al. (2011), differing only in that CR participants felt supported in their knowledge of CR processes, whereas the participants in Sansosti et al.'s (2011) study felt they needed more training in RTI. The results of my study led me to uncover areas where future research is required:

- The structure of secondary schools, as found in the literature, makes it difficult to find common time to meet. A larger study involving high schools is recommended to discover the ways that CR is functioning effectively at the secondary school level.
- A study on the level of need for mental health supports for students since COVID-19 is recommended.
- There is room for future research across a wide range of high schools that might provide more quantitative evidence from which to draw conclusions around the effectiveness of CR implementation and the differing perspectives of administrators, teachers, and system leaders.

### **Limitations**

This study was planned with thoughtfulness, care, and rigor; however, the limitations of this study need to be acknowledged. A limitation for this research is the number of participants available to complete the survey. Several teachers across the two districts were new to the profession, and that impacted the number of people who were able to complete the survey. Further, I chose three schools to conduct the study as they matched my criteria of being rural, having participants with experience with CR and included Grade 10 to 12 students, even though the compositions of rural high schools may have other grades that they serve.

Case study research could be viewed as a limitation in that the results are not easy to generalize to other settings or circumstances (Stake, 2010). I hope this case study research will provide high school practitioners with valuable information about tiered-level responses to student struggle. This case study may offer direction to system leaders developing continuum of support models in their settings. One other limitation is that this case study was designed to understand rural high school settings implementing CR, so not generalizable to all settings implementing CR. The potential for transferability still exists.

Another limitation is that the SST members interviewed for this study may have had different experiences due to levels of training, staff turnover, leadership in the school, contextual factors that impact the supports available to them, and how many years CR has been implemented in their schools.

The study was further limited, as I chose to interview 11 staff members and collected the data over a 6-week period. This provides as snapshot of CR at the beginning of a busy school year. My thinking was that the interviews would reflect and expose the experiences of struggling learners throughout their school years through the information that was provided by the SST participants.

## **Conclusion**

In my instrumental case study, I explored how participants viewed the supports available, the implementation journey and overall effectiveness of CR to promote positive educational outcomes, like attendance, academics, belonging, and graduation. The results of my study align with my beliefs about students who struggle and the support that they need to thrive in school. The key issues identified in CR meetings relate

to the ongoing development of a school's continuum of supports as well as Bronfenbrenner's (1979) Ecological Systems Model. The continuum of supports can address these key issues linked to deficits in the ecology of human development. The study was also linked to how districts implementing CR (Hewson & Hewson, 2022) utilized a four-tiered continuum of support approach, ongoing collaboration, networking, and strategizing to help schools focus on the right drivers to address the interventions needed to support students. The approaches with the highest effect size were supported by the implementation of CR.

The education of students to become fully actualized in their human development in a complex, changing world is the greatest call to action in today's society. For students to be prepared for the next stage of life after high school, whether it is in the workplace, postsecondary education, community living, or entrepreneurship, the education system must meet the increasing challenges. To support the plethora of needs and challenges that students face, high-quality teaching and exemplary school leadership are needed. These two factors have high effect sizes and are the right areas for system leaders to address. They are the right drivers because they will yield a high impact on student success (Hattie & Clarke, 2018). This study affirms that the participants asserted that CR, a tiered-level approach to tackle complex issues, can have positive outcomes for students. Research confirms that tiered-level interventions have an impact on teaching and leadership, thus making them a right driver for action (Hattie et al., 2016, as cited in Donohoo & Katz, 2017).

As a school principal for over 20 years, a district lead on inclusion for 4 years, and a teacher for 9 years, I have experienced the growing needs and complexities that

schools are facing. Leaders are tasked with finding ways to do more with less, and in many rural settings, the budgets to run schools are not commensurate to the needs in schools. I have long believed that school systems are in the best position to solve these complex issues in collaboration and community, and with a collective shared leadership approach to solving the issues. The Ecological Systems Model (Bronfenbrenner, 1979) that grounds this study addresses basic human needs for healthy development, and CR (Hewson & Hewson, 2022) provides the tiered-level approach to contribute to the healthy ecology of a child: Together, these frameworks encompass what I firmly attest contributes to success in the school system for *all* students to succeed.

The most profound learning I have to draw on for supporting students who struggle is from my Reclaiming Youth at Risk Training, which offered an Indigenous wisdom approach to supporting students (Brendtro et al., 2019). With this collective (for the good of the tribe) approach, there is an inherent belief that every child can succeed and is born with a gift, and it is the responsibility of the tribe to grow and foster that gift. This gift, according to the Kainai Nation in Alberta, Canada, is meant to be given back to their community. This defines their purpose. In Kainai terms, when they reach the point of sharing their gifts with their communities, they have reached cultural perpetuity (Katz, 2018). This collective approach, versus a more competitive approach, is one aspect of CR that requires consideration.

The cost to society is high when students do not complete high school (Taylor et al., 2017; Uppal, 2017). It makes sense to be proactive and invest in strategies to help all learners feel a sense of belonging and purpose in school (Brendtro et al., 2019; Hewson & Hewson, 2022; Uppal, 2017). The research suggests that schools need to create



learning environments that provide differentiated instruction and supports that can thwart the disengagement that leads learners to drop out (Ginwright & Cammarota, 2015; Howard, 2016; Sleeter, 2014).

The findings from this study can be used to inform CR implementation, as this is the first empirical study on this collaborative intervention. It is my hope that this study encourages other researchers to investigate CR implementation and impact on educational outcomes. CR has seven distinctive features; however, in relation to this case study, the ones that resonate with me the most are (a) that capacity building is a byproduct of collaborative discussions in supporting students through distributive coaching for staff members and (b) that the complex and diverse needs of students are covered when varied perspectives and expertise are valued (Hewson & Hewson, 2022).

### **Recommendations**

In my instrumental case study, I explored how the implementation of CR was perceived by the participants in my study. My study showed that there are elements of the implementation of this tiered intervention that align with the literature but also offers unique findings for implementors to consider. To enhance CR implementation, divisions should continue to do the following:

- Place value in the administration's level of training and ongoing networking in gaining mastery with CR processes, structures, layered team interventions, and collaborative work.
- Consider the length of time administrators need to be in a school to influence CR implementation in fluid and meaningful ways. Researchers on change theory

recommend that for deep change to occur, and sink in deeply into an organization's culture, takes 5 to 10 years (Kotter, 2008).

- Invest in CR and ensure division calendars support CR days, and invest in CR implementation, networking, training, and ongoing support. One of the highest effect sizes for student success is teacher efficacy (Hattie et al., 2016, as cited in Donohoo & Katz, 2017) and therefore it is an important element for focus in CR implementation.
- Value a school's unique settings, and work together to establish school goals and the focus for professional learning communities.
- Include key stakeholders in meetings to ensure that varied perspectives and strategies are presented and shared to address the key issues that students are facing; specific to this case are educational assistants and student assistants.

A committed staff working together as they hold one another accountable is the basis of CR and has ties to the research in the literature review. Lencioni (2002) asserted that a team that holds members accountable to improve identifies problems quickly, establishes respect among team members, and keeps one another to the same high standards. To rely on one method to support the thorny work of addressing youth at risk is not realistic; the results of this study provide encouragement that CR, a tiered-level intervention that focuses on an active, flexible, and malleable continuum of supports, can address the ever-changing needs in school systems. The results show that CR has influenced four key areas of high impact: (a) the belief in a student's ability; (b) the collective efficacy of teachers; (c) a four-tiered approach to supporting student needs with a continuum of supports, as an intervention; and (d) leadership (Hattie & Clarke, 2018)

Ultimately, my research highlights the need for careful implementation of CR, to ensure that schools have the leaders that can address the complexities inherent in schools today and in the future. To support a successful CR implementation, the following is required: (a) ongoing support, (b) time and space for ongoing networking and coaching, (c) district commitment to the financial support required for meeting time and key supports, (d) leaders that can be creative in scheduling the time for collaboration and embracing the challenges facing schools, (e) an open mindset of believing that every student can achieve, and (f) for the specific purpose of this study, actions that support that every student can obtain their high school diploma. The success of schools demands high-quality teaching, with leadership that can support the collaborative structures required to address the growing needs of students, despite the conversely decreasing budgets to address these challenges. Since it is my belief that children are society's most valuable resource, I believe it is the greatest call to action in the twenty-first century.

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## Appendix A: Jigsaw Learning Survey

### CRM Survey on Structures and Procedures

#### Principal Questionnaire

#### Staff Quest

This questionnaire is designed to help us gain a better understanding of the kinds of things that created challenges for implementing collaborative response model (CRM)

Directions: Please indicate our opinion about each of the questions below by marking one of the nine responses in the columns on the right side. The scale of responses ranges from “None at all” and high extremes. You may choose any of the nine possible responses, since each represents a degree on the continuum. Your answers are confidential.

Please respond to each of the questions by considering the combination of your current ability, resources, and opportunity to do each of the following in your present position.

To what degree was each of the essential elements of a Collaborative Team Meeting (CTM) evident in Student Support Team meetings?

		Not at all		Very little		Some degree		Quite a bit		A great deal
1.	Facilitate maximum adult involvement	1	2	3	4	5	6	7	8	9

		Not at all		Very little		Some degree		Quite a bit		A great deal
2.	Provide focus and timeline for meetings	1	2	3	4	5	6	7	8	9
3.	Pre-meeting processes	1	2	3	4	5	6	7	8	9
4.	Defined roles	1	2	3	4	5	6	7	8	9
5.	Team Norms	1	2	3	4	5	6	7	8	9
6.	Meeting agenda and notes	1	2	3	4	5	6	7	8	9
7.	Celebrations	1	2	3	4	5	6	7	8	9
8.	Focus on key issues	1	2	3	4	5	6	7	8	9
9.	Action focused	1	2	3	4	5	6	7	8	9

## **Appendix B: Collaborative Response Questionnaire**

### **SURVEY INFORMATION AND CONSENT STATEMENT**

This questionnaire is part of a doctoral research study being conducted by Janice Muench, in her role as a student at the University of Portland. Its purpose is to gain a better understanding of the factors that create success or challenges for implementing Collaborative Response (CR).

The information gathered will be shared with the district, in aggregated form where no one can be identified, for improvement purposes.

**Implementation Journey:** We all understand that implementation occurs at different rates. It is important to help me understand where everyone is at in the journey, and to explore barriers to implementation so that improvements and support can be provided. This research is non-evaluative. Please provide your candid opinions as answers will not be tracked to participants.

**Survey Confidentiality:** The data will be shared with the researcher, Janice Muench. Any potentially identifying information will be removed, and the data will be analyzed as a set before summary data would be shared with the district. If you have any questions, please contact my doctoral chair, Dr. Julie Kalnin (Kalnin@up.edu) or me by phone (780-645-1428) or email (muench23@up.edu). If you have concerns about participation, you can also contact the University of Portland's Institutional Review Board (irb@up.edu).

**Statement of Consent:** I understand the purpose and use of this survey, and I consent to having my responses used in this research. My email can be included so that the researcher can communicate with me about participation in a one-to-one follow-up

interview. The email address is not required if you do not want to be involved in an interview. I understand that I can stop responding to this survey at any point.

Y/N consent I consent to participating in the study.

Yes (1)

No (2)

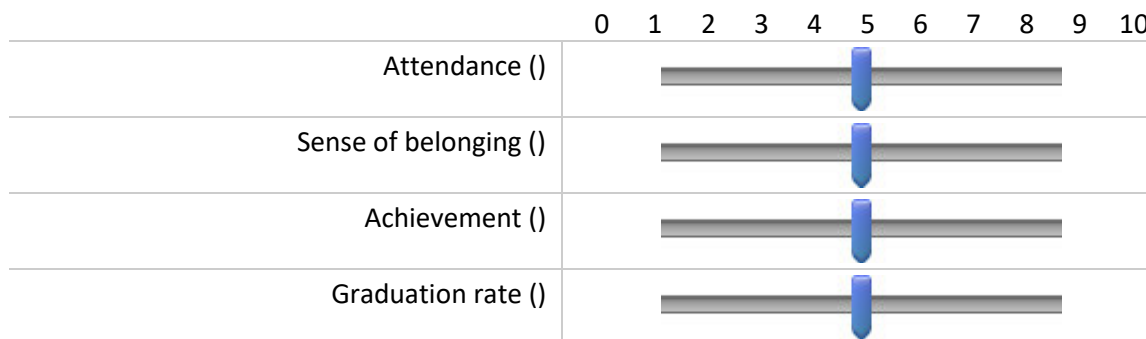
*Skip To: End of Survey If I consent to participating in the study. = No*

## PURPOSE

This survey seeks to understand the degree to which the tiered collaborative student supports in rural communities assist students in staying on track to obtain their high school diplomas.

ET1 Given your knowledge of the impact of Collaborative Response (CR), how effective is this work at increasing student outcomes in the following areas?

Rate from 0 (not at all effective) to 10 (highly effective)

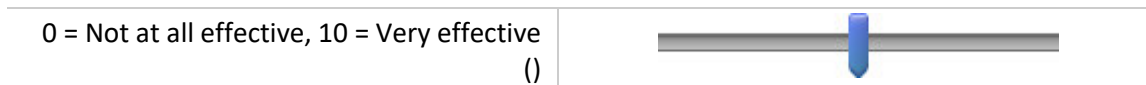


## TEAMS IN CR

For the next 3 questions you will be asked to evaluate the effectiveness of Collaborative Team Meetings (CTM) and Student Support Team (SST) structures. At the end of those questions, you can choose to further explain your ratings.

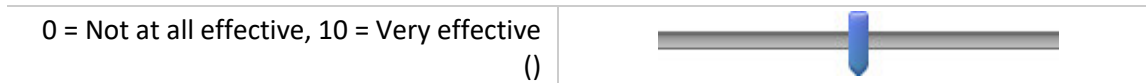
ET2 How do you rate your success in having the CTM drive the SST's involvement in supporting students?

0 1 2 3 4 5 6 7 8 9 10



ET3 How do you rate the effectiveness of SSTs in your school?

0 1 2 3 4 5 6 7 8 9 10















ET4 In addressing key issues, how effective is the communication between CTMs and SSTs?

0 1 2 3 4 5 6 7 8 9 10



ET5 In CR there are guidelines in place to ensure that collaborative processes function in meaningful ways. Indicate the importance of the following key guidelines in your CR practice. Rate from 1 star (low importance) to 5 stars (high importance).

Maximum adult roles involved (1)					
Roles clearly defined for the meeting (2)					
Focus established for the meeting in an annual calendar (3-6 weeks) (3)					
Team members come prepared for the conversation - key issue identified (4)					
Team norms visualized and referenced (5)					
Meeting agenda and notes documentation established and projected (6)					
Celebrations to identify impact to begin the meeting (7)					
Discussion for students focus on key issues (8)					
Actions determined are primarily focused on universal/classroom support (9)					



ET6 Please explain your ratings from the previous questions regarding key guidelines and teams in CR.

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### **BARRIERS TO CR IMPLEMENTATION**

In the following section, you will be asked about barriers you face in implementing CR.

B1 One barrier (as cited in literature) to the success of tiered-level interventions at the secondary level is access to common assessment measures in order to implement targeted interventions for struggling learners. How true is this statement in your school?

0 1 2 3 4 5 6 7 8 9 10

0 = Not true at all, 10 = Very true ( )



B2 Please indicate the degree to which the barriers listed below exist in supporting students across the tiers?

	Not at All (5)	Very Little (6)	Somewhat (8)	A Great Deal (10)
Common time to meet with all stakeholders (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lack of support for specialized needs (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Embedded collaboration time (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scheduling/timetable stressors (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lack of common assessment to target the intervention needed (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

B3 Please explain your ratings in the questions above.

What contributes to eliminating barriers in your situation? Elaborate on any other barriers not listed above that interfere with the implementation of tiered supports for students.

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## SUPPORTS AVAILABLE

In the following section, you will be asked about the supports you have access to.

S1 Please use the slider to indicate to what degree your students have access to the following supports. Rate from 0 (minimal degree of access) to 10 (high degree of access).

	0	1	2	3	4	5	6	7	8	9	10
<b>Tier 1 Universal</b> - Classroom Instruction (Assistive Technology-R&W, Welcoming, Formative Assessment, Differentiation) ()											
<b>Tier 2 Differentiated</b> - Classroom Supports (Accommodations, Parent Communication, Formative Assessment, Trained Support in the classroom) ()											
<b>Tier 3 School Supports</b> - Targeted (EA support, Support Block for Targeted Intervention, Small Group Instruction, Tutoring) ()											
<b>Tier 4 Intensive Supports</b> (Mental Health, FSLW, Inclusive Education Director, VTRA Plans, SLP, OT, PT, Psychologist) ()											

S2 To what degree are the four tiers of collaborative supports mentioned above in place in your school?

- Not at all (1)
- Very little (2)
- To some degree (3)
- Quite a bit (4)
- A great deal (6)

S3 To what degree are you able to access Tier 4 Intensive Interventions for students in your school?

- Not at all (1)
- Very little (2)
- To some degree (3)
- Quite a bit (4)
- A great deal (6)

S4 Please explain your ratings with regards to the access to tiered supports.

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### **SATISFACTION PERSONAL SATISFACTION WITH CR**

In the following section, you will be asked about your personal satisfaction with CR.

PS1 To what extent do you feel satisfied with CR implementation, processes, and procedures?

- Not at all (1)
- Very little (2)
- To some degree (3)
- Quite a bit (4)
- A great deal (5)

PS2 To what extent do you find your school team's participation in CR effective in improving graduation rates?

- Not at all (1)
- Very little (3)
- To some degree (4)
- Quite a bit (5)
- A great deal (6)

PS3 Please indicate the degree to which the following aspects of your team involvement have yielded the most success?

	Very little success (1)	Some success (2)	A great deal of success (3)
Collaborative Team Meetings (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Student Support Meetings (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Specific School Interventions (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

PS4 Please explain your ratings from above.

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PS5 What resources would MOST assist your team in making improvements? Please explain if you responded "other".

- Professional development (1)
- Embedded time to collaborate (2)
- Specialist support (3)
- Other (4) \_\_\_\_\_

PS6 Can you share a success story that you see as indicative that the CR process contributed to supporting the student on the path to graduation?

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**Your perspectives are valuable.** Please offer any other insights about your experience with CR that may not have been covered in the questionnaire.

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## **PROFESSIONAL BACKGROUND**

In the following section, you will be asked to provide some details about your professional background.

PB1 Identify your educational role by selecting one of the following:

- Teacher (1)
- Administrator (2)
- Counselor/Psychologist (3)
- Director (4)
- Other (5) \_\_\_\_\_

PB2 Identify the grade level you primarily serve by selecting one of the following:

- K-6 (1)
- 7-9 (2)
- 7-12 (3)
- 10-12 (4)
- Other (5) \_\_\_\_\_

PB3 One goal of this research is to offer district leaders aggregate data to help to improve CR. For this reason, separating the data between school divisions is important. Please indicate your school division.

\_\_\_\_\_

PB4 Including this year, how long have you participated on the CR team?

- 1-5 years (1)
- 6-10 years (2)
- 11-15 years (3)
- 15-20 years (4)
- 21 years + (5)

### **CLOSING & FOLLOW-UP**

Thank you for taking the time to complete this survey.

**Y/N Do you have more to say about Collaborative Response?**

Are you willing to participate in a future one-to-one interview regarding how Student Support Teams impact student success in general and high school graduation in particular?

- Yes, I am willing to participate in a follow-up interview. (1)
- No, I do not wish to participate in follow-up research activities. (2)

*Display This Question:*

*If Do you have more to say about Collaborative Response? Are you willing to participate in a future...  
= Yes, I am willing to participate in a follow-up interview.*

Please provide your email address where you can be contacted to arrange a one-to-one interview.

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## Appendix C: Consent Form for Interviews

June 22, 2022

You are invited to participate in a research study conducted by Janice Muench as part of the UNIVERSITY OF PORTLAND School of Education doctoral program. I hope to learn how collaborative student support teams guide students on the path to high school graduation. You were selected as a possible participant in this study because you identified in the survey that you are feeling confident in your Collaborative Response structures and processes.

This form includes detailed information on the research to help you decide whether to participate. Please read it carefully and ask any questions you have before you agree to participate.

If you decide to participate, you will participate in a one-to-one interview that will take up to 45 minutes. The survey consists of 11 questions; general, specific and improvement themes will be covered. The interview will be recorded using smart phone recording technology. This will be a one-time interview that will be transcribed and then shared with you to ensure that your transcribed answers match what you intended to communicate. All identifying information will be removed and coded to ensure participant anonymity. The researcher will connect with the participant of the interview in person, in a google meet, or in a way that is most comfortable for the participant.

The inconvenience of the participation surrounds carving out the time (45 minutes to an hour) to sit with the researcher to answer questions about collaborative response. There is no cost to participate in this study, as the researcher will travel to the interviewee's desired interview site. Although the researcher will offer a small token of

appreciation to participation, it is not commensurate to the amount of time that is required for participation. The benefit to participating in the research is that you will be a part of an important study that intends to fill a gap in the research surrounding structural, tiered supports that impact students in high school on their path to graduate with a diploma. However, I cannot guarantee that you personally will receive any benefits from this research.

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission or as required by law. Subject identities will be kept confidential by The researcher will protect the identity of the participants by using pseudonyms to ensure that no response could come back to them and potentially cause them harm. There anonymity is deemed essential for the researcher to ensure responses that reflected their experiences using the CR structures. Since the district is interested in knowing how the intervention of CR is impacting schools and student success, it is important to recognize and inform participants that they have the freedom to opt out of participation. It is imperative to protect anonymity so that no harm can come to participants if they choose to share their experiences with the CR implementation team.

Any information collected for this study, after identifiable private information is removed, may be used for future research studies.

Your participation is voluntary. Your decision whether or not to participate will not affect your relationship with Battle River School Division/Lakeland Catholic School Division. If you decide to participate, you are free to withdraw your consent and discontinue participation at any time without penalty.

If you have any questions about the study, please feel free to contact Janice Muench (780) 645-1428 or by email at muench23@up.edu. You may also contact my faculty advisor Julie Kalnin at kalnin@up.edu. If you have questions regarding your rights as a research subject, please contact the IRB (IRB@up.edu). You will be offered a copy of this form to keep.

Your signature indicates that you have read and understand the information provided above, that you willingly agree to participate, that you may withdraw your consent at any time and discontinue participation without penalty, that you will receive a copy of this form, and that you are not waiving any legal claims.

I, \_\_\_\_\_, understand the implications of this research project and **agree / do not agree** (circle one) to participate in this study.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## Appendix D: One-to-One Interview Questions

### General:

1. I'd like to hear about your involvement in CR. Can you share a little about how you became involved, how long you have been involved, and what role(s) you have played over time? (Prompt if not covered: How do the roles on CR link/intertwine with SST & what is your role with each team?)

2. Can you walk me through a typical SST meeting?

There are many layers of support in place to ensure that collaborative processes function in meaningful ways. Using the following cards, can you place the elements of the CR process in order of importance?

a. CARDS (Mixed UP):

1. Maximum adult roles involved
2. Roles clearly defined for the meeting
3. Focus established for the meeting in an annual calendar (3-6 weeks)
4. Team members come prepared for the conversation - key issue identified
5. Team norms visualized and referenced
6. Meeting agenda and notes documentation established and projected
7. Celebrations to identify impact to begin the meeting
8. Discussion for students focus on key issues
9. Actions determined are primarily focused on universal/classroom support (Tier 1/2)

Great! Now, talk me through why you organized the cards in the way you did.

3. How do you see these processes (from the card activity) impacting the effectiveness of your team in supporting students to stay in school and graduate?

**Specific:**

4. In Collaborative Response, classroom teachers play a central role in the Tier 2 responses. To what degree is this true in your setting?
  - a. Can you share with me how the Collaborative Team Members (CTM) and the Student Support Team (SST) members interact (if they do) to support students to stay on track to graduate from high school?
  - b. Follow-up: If you see this as a high functioning relationship—what helped to establish this? If you see this as separate (not interacting)—what is your evaluation on this.
5. To what degree has working with families been an important part of your SST's functioning over the past 3 years?
  - a. You have just described a successful example. Help me to understand the role of CR in that situation. Can you compare this successful instance of the team's work to an earlier case (maybe prior to CR) where the team wasn't successful with a family?
  - b. What do you see as different in what the team does now, versus what they were doing in the past and how is that making a positive difference?
6. What role do Collaborative Team Members play in helping students to graduate? What specific outcomes do you see? What are the perceived benefits that

Collaborative Team Members and Student Support Team members observe from their work in keeping students on track to achieve their high school diploma?

7. Building students' connections to the school an important element of CR. Share with me how successful you see your team in accomplishing this goal?
  - a) Strengths:
  - b) Areas for Growth:
8. Reflecting on CR approaches. Can you discuss your effectiveness with:
  - a) Building relationships?
  - b) Retaining Students?
  - c) Supporting academic learning?
  - d) Improving graduation rates?

Can you speak to which you are most and least effect with?

**Improvement:**

9. Thinking back now, to moments when your SST experienced challenges in supporting students— what could be done to in the future to improve the CR, CTM and SST structures and processes?
10. Implementation is a process—on your teams' journey, what would you identify as an accomplishment—something you now do routinely and well that you did not used to do?
11. What is next on your journey? What areas for improvement do you personally see as important? What would it take for your team to make progress toward that goal?

### Appendix E: Categories and Codes

Participant responses	School A I=3 Pseudonyms	School A Survey short answer (SSA)	School B I=3	School B Survey short answer (SSA)	School C I=5 Interviews	School C Survey short answer (SSA)	Total Responses
Data Theme and code (and abbreviation)	Interview School A	School A	Interview School B	School B	Interview School C	School C	Interview (I) Survey (S)
Structures play a key role (EMB, CRSCHEd, DS, RICR)	Kevin, Joe, Veronica	Total: 19 SSA A-5	Mark, Rose, John	Total: 19 SSA B-6	Carrie, Chris, Sherri, Adam, Brandon C-8	Total: 19 (SSA) C-8	11 (I) 79 (S)
Access to Support (EA, MH, CC, LC, MA, MHTR)	Kevin, Joe, Veronica	Total: 20 (SSA) A-5	Mark, John	Total: 20 (SSA) B-7	Carrie, Chris, Sherri, Adam, Brandon C-8	Total:20 (SSA) C-8	10 (I) 54 (S)
CR Encourages Distributed Leadership (LEAD, SUCC)	Veronica, Kevin	Total:8 (SSA) A-2	John	Total:8 (SSA) B-2	Sherri	Total:8 (SSA) C-4	4 (I) 5 (S)
Common assessments needed (CA)	Veronica, Joe	Total:5 (SSA) A-2	John, Mark	Total:5 (SSA) B-2	Chris	Total:5 (SSA) C-1	5 (I) 29 (S)
Mental health support (KSI) (MH)	Kevin, Veronica	Total:10 (SSA) A-2	Mark, John, Rose	Total:10 (SSA) B-4	Adam, Carrie, Chris, Sherri, Brandon	Total:10 (SSA) C-4	10 (I) 15 (S)
Layering of Team Increases CR Success (CTM, SST, COMM)	Kevin, Veronica, Joe	Total:35 (SSA) A-9	Mark, John, Rose	Total:35 (SSA) B-14	Adam, Carrie, Chris, Sherri, Brandon	Total:35 (SSA) C-17	11 (I) 49 (S)
CR increases teaching practice (BTC) TRN, TRN, VUL, REL, CONN	Kevin, Veronica, Joe	Total:14 (SSA) A-4	Mark, John, Rose	Total:14 (SSA) B-4	Brandon, Adam, Chris, Carrie, Sherri	Total:14 (SSA) C-6	15(I) 52 (S)
CR improves learning outcomes (+ LO) GRAD, ATT, RET, ACA, DDCA	Kevin, Veronica, Joe	Total:8 (SSA) A-2	Mark, John, Rose	Total:8 (SSA) B-4	Chris, Carrie, Adam, Brandon	Total:8 (SSA) C-2	10 (I) 183(S)

*Note.* Participant responses were counted via first and second cycle coding and then confirmed through applications in Quirkos Software analysis.

## Appendix F: Continuum of Supports—School Districts 1 and 2

### School District 1

Intervention Criteria	
<ol style="list-style-type: none"> <li>1. Teaches targeted skill that can be monitored/assessed.</li> <li>2. Delivered by a highly qualified classroom teacher or another specialist.</li> <li>3. Provides additional instruction for an individual or small group.</li> </ol>	
<b>TIER 1</b> <b>CLASSROOM INSTRUCTION</b>	
Interventions at Tier 1 are classroom based, providing an additional level of support by the classroom teacher (or an educational assistant under the direction of the classroom teacher)	
INTERVENTION	DESCRIPTION
Classroom Arrangement	Locating students in the classroom where they have the greatest chance for success (e.g., seating plans)
Consistent Parent Communication	Parents are informed and updated throughout the year. Positive communication whenever possible.
Readiness to Learn	Addressing physical, social, or emotional needs (water, washroom, self regulation of emotions) before academic needs.
Welcoming Students at Any Time	Connect before redirect! Allowing students to join class late and connecting later to discuss.
Established Classroom Routine	Importance of time management and remaining focused in class. Support for students arriving late. Visual agenda or timetable on board, starting the class in prayer, silent reading, bell work, etc.
Maintaining Dignity of Students	Having private conversations (redirection, dress code, keeping marks private, avoiding removal from class as much as possible, being aware of an audience when discussing student concerns, culturally responsive environments).
Accommodations for Student Success	Support for all learners in multiple formats including audio exams, word walls, graphic organizers, chunking work, digital vs paper, manipulatives, extra time, formula sheets, data books, etc.
Differentiated Instruction	Evaluating and meeting students where they are at. Allowing multiple ways to show learning, where curriculum allows.
Assessment for Learning	The right to rewrite during the learning process. More than summative assessment given as feedback. A balance of assessments used to evaluate student learning.
Timely Feedback on Student Learning	Weekly updates showing student progress through PowerSchool. Meaningful feedback based on outcomes. The opportunity to show learning at any time.
Safe and Caring Classroom Environment	Classroom space should be clean, tidy, organized and an environment conducive to learning.
Teacher group selection	Teacher decides which groups students will be in during collaboration, instead of students choosing.
Allowing and encouraging "breaks"	Telling students they can take a break and suggesting when you see a student becoming dysregulated.
<b>TIER 2</b> <b>CLASSROOM SUPPORTS</b>	
STRATEGY	DETAILS
Build Positive Relationships	More positive than negative authentic interactions with students to build rapport. Connect with the student before you redirect the student. Take the time to discover things the student may be interested in. (teacher-student, student-student, teacher-parent) Crusader Cards, flexible groupings.
Proximity	Physical proximity to fidgets, the board, the teacher, another student, a window...



<b>Class/Individual Breaks</b>	Brain breaks, mindfulness, self-regulation breaks.
<b>Environment</b>	structured environment, specialized seating, fidgets, color and lighting choices, "calm corner," white noise.
<b>Cooperative Learning</b>	Group work allowed, deliberate pairings, collaborative technology.
<b>Differentiated Instruction</b>	Differentiate lessons, activities or assignments by level, style, amount.
<b>One on One</b>	Have another teacher supervise your class so that you can work individually with a student who needs lots of one-on-one help. When a student is dysregulated, bring in an adult who has a positive relationship with that student to diffuse the situation. (to co-regulate the student, not to solve the problem).
<b>Professional Collaboration</b>	When struggling to teach a concept, talk to another teacher with skills to help you with teaching the concept. Use another adult in the school, like the librarian etc. to participate in activities with your class to have more positive relationships with students. Team teaching.
<b>Parent Communication</b>	Report Cards are not the first contact for academic concerns. Emails and phone calls when a concern arises with a student and willingness to contact/update parents throughout the year.

### TIER 3

#### SCHOOL SUPPORTS

**Interventions at Tier 3 are school based, providing an additional level of support coordinated by someone other than the classroom teacher.**

INTERVENTION	DESCRIPTION
<b>Student Services Team Referral</b>	Student Services Team will apply other strategies for student success that the teacher has not already attempted (parent meeting, letter home, case conference, further referrals for support etc.)
<b>Family Outreach Worker</b>	Providing emotional support and strategies to students and families.
<b>School Administration</b>	Someone available at all times when a student requires support.
<b>Student Assistants</b>	Work one-one-one or with small groups of students to support students with diverse learning needs.
<b>Classroom Support Teacher</b>	Providing strategies for success for inclusive education students. IE cheat sheets for new students.
<b>Collaborative Response Model</b>	Provide strategies for all students.
<b>Academic &amp; Career Advising</b>	Working with students to provide contacts for tutoring, advising students for selection of courses and preparation for post-secondary.
<b>English Language Learner Support</b>	Through CST or designated ELL Support teacher, supports for ELL students and families.
<b>Extracurricular School Activities</b>	Athletics, fine arts, activities.
<b>Non-Violent Crisis Intervention Team</b>	Support for student regulation.

### TIER 4

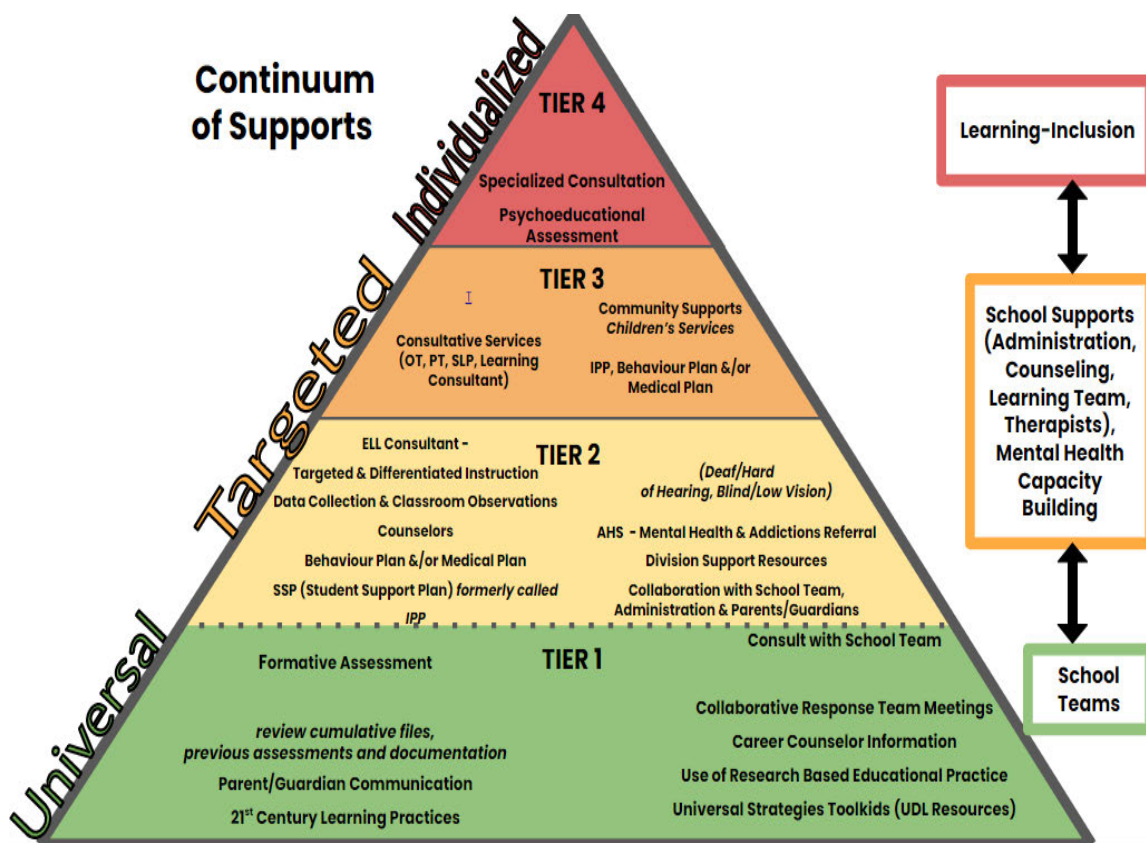
#### INTENSIVE SUPPORTS

**Interventions here are intensive and typically documented in an individual program plan**

INTERVENTION	DESCRIPTION
<b>Lakeland Centre for FASD</b>	Supports for students with Fetal Alcohol Spectrum Disorder.
<b>RCMP/Peace Officer</b>	Presentations for students regarding drugs, alcohol, safety, bullying.
<b>Mental Health and Addictions</b>	Support for students struggling with mental health and addiction issues.
<b>AISH (Assured Income for Severely Handicapped)</b>	Transition to support for students that will be accessing AISH as an adult.

<b>Occupational Therapy/Speech Therapy</b>	Support for students with occupational and speech challenges.
<b>Multidisciplinary Team</b>	SLP, OT, further IE supports.
<b>Off Campus Education Partners</b>	Off Campus Education Partners Working with community organizations and businesses to provide work experience, work study and Registered Apprenticeship Program opportunities.
<b>Dragonfly Counselling Services</b>	Mental health support, sexual assault counselling.
<b>Indigenous Outreach Worker</b>	Working with Indigenous families that require support.
<b>Glenrose Rehabilitation Hospital</b>	Rehabilitation assessment and hospital care where required.
<b>CASA House</b>	Supporting complex needs through in-house treatment

School District 2



Note. AHS = Alberta Health Services; ELL = English language learner; IPP = individual program plan; OT = occupational therapy; PT = physical therapy; SLP = speech-language pathology; UDL = Universal Design for Learning.

### Appendix G: Themes and Codes

Research Question	Themes	Categories	Codes
RQ1: Available student supports	Available supports	Tier 1–Tier 4	T1-T4
	Access to supports	Mental health support	MH
		Career counselor	CC
		Learning coaches	LC
		Educational assistants	EA
Mental health professional learning		PL	
RQ2: Effectiveness of CR processes and structures	Structures play a key role in CR	Embedded time	EMB
		District support	DS
		Creative scheduling	SCHEd
		Roles in CR	ROLE
	Layering of teams increases CR success	CTM	LAYTEAM
		SST Communication	SST COMM
RQ3: SST outcomes	CR improves teaching practice	Build teacher capacity	BTC
		Training	PL
		Vulnerability	VUL
		Relationship	REL
		Connection	CONN
		Mixed meetings Communication	LAYMTG COMM
	CR enables distributed leadership	Leadership Succession	LEAD SUCC
	CR positively influences educational outcomes	Attendance	ATT
		Belonging	BEL
		Graduation Academics	GRAD ACA

*Note.* CR = Collaborative Response; SST = Student Support Team.