Investigating Change Management in Broadmeadows Schools:

Advancing Trauma-Informed Education

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By:
Vanessa Cardaropoli
William Fisher
David Reynolds
gr-m22.change@gmail.com

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Professors:
Fabio Carrera and Stephen McCauley

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Acknowledgements

We would like to acknowledge the Wurundjeri people who are the Traditional Custodians of this land. We would also like to pay respect to the Elders both past and present of the Kulin Nation and extend that respect to other Aboriginal people present. We would like to acknowledge the Wurundjeri people who are the Traditional Custodians of this land. We would also like to pay respect to the Elders past, present, and emerging of the Kulin Nation and extend that respect to other Elders and Aboriginal people present today. This always was and always will be Aboriginal land.

Abstract

Disengagement in Broadmeadow schools is much worse than the surrounding areas and other communities in Australia. Working with the Northern Centre for Excellence in School Engagement (NCESE), we will create a framework for implementing trauma informed education to increase engagement in schools. To do this we first need to understand barriers and strategies to implement trauma informed education, through interviews with experts. To propose a framework we reviewed literature on the topic of change management. From those methods we recommend that schools have a form to share their practices, to spread ideas and alleviate uncertainty in those ideas, have in person meetings with teachers and principals from different schools where they can discuss aspects trauma informed education, and to use the REDUCE framework proposed in *The Catalyst* to reduce the barriers to change.

Authorship

The authors of this report contributed equally to the final product. Vanessa Cardaropoli and William Fisher collaborated to write the Executive Summary. Vanessa Cardaropoli and David Reynolds collaborated to write the Introduction. William Fisher and David Reynolds collaborated to create the Background. Vanessa Cardaropoli wrote the majority of the Methods section. David Reynolds wrote the majority of the Results and Analysis and the Conclusions and Recommendations sections. Each section was edited and peer-reviewed by each group member. NCESE's Eric Dommers and Professors Fabio Carrera and Stephen McCauley provided feedback and advice on the construction and direction of the report.

Executive Summary

Introduction

This project takes place in Broadmeadows, a suburb of Melbourne in Victoria. Broadmeadows is ranked one of the most disadvantaged areas in Australia. Because of this, many of the students there face additional challenges in school. In this project, we worked with the Northern Centre for Excellence in School Engagement, which is based in Broadmeadows. The NCESE strives to develop and implement school and community programs that support school engagement for all, including (and especially) their most vulnerable students.

The NCESE runs a program called Project REAL (Re-engagement in Education And Learning). Schools in the Broadmeadows area can refer the students most in need to Project REAL on a case-by-case basis. These students receive one-on-one help from the staff and benefit from Trauma-Informed and Social and Emotional Learning best practices. However, the schools would like to benefit **all** students with these best practices.

WPI has worked on projects in the past to help define these best practices. This project is all about how to affect change and get these best practices into the schools. We will do this by doing the research and proposing a framework for change that can be applied to Broadmeadows primary schools.

Background

Schools in the Broadmeadows area have an increased number of disengaged students, typically in Australia 80-90% of all students are actively engaged or "Tier 1" students, 15% of students are passively disengaged or "Tier 2" students, and 2-5% are actively disengaged or "Tier 3" students. However, in Broadmeadows about 50-60% of students are Tier 1, 35% are Tier 2, 5-8% are Tier 3, and principals have noted the emergence of Tier 4 students who causes major disruptions in classrooms and many problems for the schools.

In 2017, the Banksia Gardens Project Re-engagement in Education and Learning (REAL) was launched with the idea to re-engage students who have complex or challenging needs. Banksia Gardens' method to help at-risk students is by incorporating flexible learning options (FLO) into the school system. Educators involved with the FLO are trained more effectively in how to help these students and FLOs typically provide an opportunity for educators to work with the student one-on-one. Upon seeing that Project REAL was effective, schools wanted to provide the same support from within their schools. From this NCESE was created to help schools do just that, focusing on tier 3 students. They provide outside training to their Communities of Practice. These seminars educate teachers on trauma informed practices and gives them the knowledge to use those methods in classrooms and allows principals to make informed decisions to help institute trauma informed education.

Trauma-informed education is a style of education that tries to accommodate students who may be experiencing trauma at home. This is most often achieved through training school staff to recognize when a student is exhibiting signs of trauma, and then having a framework to refer those students to get the help they need. The approach Project REAL uses with its students, families, and schools represents a local adaptation of theoretical and practice-based components from: Trauma-informed practices (and Trauma-Informed Positive Education), the ARC Framework, and Social and Emotional Learning (CASEL Framework).

ARC is both used on an individual level and as an organizational framework. ARC targets engagement in the following areas: Attachment, Regulation, and Competency. Attachment focuses on strengthening the care system around children, Regulation emphasizes cultivating youth awareness and skill in identifying, understanding, tolerating, and managing internal experience, and Competency focuses on positive decision-making.

CASEL works to foster knowledge, skills, and attitudes across five areas of social and emotional competence. These five areas are self-awareness, self-management, social awareness, relationship skills, and responsible decision-making. The CASEL framework also establishes equitable learning environments and coordinates practices across four key settings that support students' social, emotional, and academic development.

The Positive Behavior for Learning (PBL) framework supports schools to improve social, emotional, behavioral, and academic outcomes for students. Schools can use PBL to analyze and improve learning and behavior outcomes, select evidence based practices for student support and intervention, and provide support for staff in maintaining consistent and proactive school wide systems and practices.

Additionally, the science of learning and development, or SOLD, studies how best to teach and develop children. This approach differs from more typical approaches to the study of education by attempting to apply scientific principles to the field. This involves an increased effort to find quantifiable results and produce repeatable results. These principles attempt to create the most conducive environment and circumstances to aid student learning. When these conditions are not met, students are vulnerable to feelings of anxiety and unease. These feelings prevent students from being able to effectively learn because while these feelings persist the students are not able to fully focus. When steps are taken to account for SOLD practices, schools produce higher academic achievements among their students as well as form better relationships, which can aid them in all aspects of their lives.

These models and many others operate on the same basic ideologies. They all implement some sort of social belonging, engagement, and attachment, allowing for emotion identification, regulation, expression, and development of identity and choice.

When trying to implement change into a school it is important to think about how to implement and manage that change. This is called change management. When school systems implement change, it is critical that they have a structured and organized system to implement change in their schools. This includes a clear core mission, budgeting, proper training for all staff, communication amongst staff, and persistence in achieving set goals.

As expected, there are many obstacles to implementing change. The change might fail due to losing sight of the core mission. Another challenge to implementing change in a school setting is a lack of funding. While this usually isn't something that schools can control, it has a major impact on the success of the changes. Insufficient funds lead to program and staff cuts causing the system to fail.

One of the most common obstacles to implementing trauma-informed practices is maintaining staff support and morale. Without support from the faculty there can be lowered morale (Berger & Martin, 2021). This could lead the faculty to apply pressure on the school to cut the program as they are forced to adhere to principles they don't believe in.

Change in school settings ultimately means nothing if the change is not able to be maintained. When trauma-informed support systems are simply forced into a school setting without careful thought and planning the school will see very few of the benefits. Poorly planned programs are likely to run over budget, often don't educate faculty enough about the approach, and still don't provide at-risk students with the help that they need. Without a plan, schools may hire unnecessary staff which could lead to budget overruns.

Methods

In this chapter, we describe the methods we used to ultimately achieve our goal: to *help* the NCESE to achieve their goal of changing the educational approach of the Broadmeadows school system to a more trauma-informed approach by creating a framework to further the adoption of these strategies. We organized the project around two main objectives:
1. Understanding the obstacles to and strategies through which to implement trauma-informed practices in school systems in Massachusetts and Victoria.
2. Propose a framework for implementing change that can be applied to Broadmeadows primary schools.

We achieved the first objective by performing two semi-structured interviews with three experts in change management in schools. The first was in Massachusetts with Dr. Jen Carey over zoom. She is the Founding Executive Director of the Worcester Educational Collaborative (WEC). The WEC has done work to implement trauma-informed education into Worcester public schools.

In addition to Dr. Jen Carey, we also interviewed two experts in Victoria. The experts we interviewed are Liam Leonard and Debra Parkinson. Liam is currently a social policy consultant and Adjunct Research Fellow with Monash University. Before this, he has done a lot of research and work on making schools a safer place for LGBTQ+ students with Gay and Lesbian Health

Victoria. Debra Parkinson is the Director at Gender and Disaster Australia. Before this, she also worked change in local schools relating to high dropout rates among the students.

To achieve the second objective, we proposed a framework for change to the NCESE. We reviewed the literature on change management and discovered *The Catalyst* by Jonah Berger. The crux of this book is the REDUCE framework for change. Simply put, the REDUCE framework is all about removing the barriers to change – opposed to trying to force through.

Using this framework, we also created a form for the NCESE. This form focuses on the "Corroborating Evidence" section of the REDUCE framework. It is a google form that can be filled out by the principals to share their success stories of change in their schools.

Results and Analysis

In this chapter, we discuss two main sections, the lessons we learned from the experts in the field and the REDUCE framework for change.

First are the five main takeaways from our interviews with the experts. These takeaways are advice that the experts gave us on implementing change in a school setting. The first piece of advice that was given in the interviews was to understand lived experiences. Ensuring that you understand the experiences of the people you are trying to reach gives you the best opportunity to propose changes that will make a difference as well as be accepted by the community. The second piece of advice was to establish a comprehensive evidence base. You need to make sure you build credibility to back up your claims so they will be accepted. The third piece of advice was to have an evaluation process to provide feedback on the success of the change or program. This is important to the final framework because it allows it to accrue evidence of its efficacy rapidly as well as allowing changes to be adjusted and fine-tuned as needed. The fourth piece of advice was to give the community ownership. This was emphasized especially in each interview. Giving the community ownership of the change gives them a stake in its success and usually means they will work harder to ensure the success of the change. The fifth and final piece of information that was gathered from the interviews was that each community is different. Any framework developed needs to be versatile enough to be able to be used in different situations.

The framework for change that we chose for the NCESE is called the REDUCE framework. The REDUCE framework's core purpose is to show how to successfully change someone's mind. In this context, it is being applied to organizational change, particularly within Victorian schools. It serves two purposes in this setting; the first is to convince new schools that the changes are necessary, and the second is to provide a framework for schools attempting to implement change to follow. This framework was first conceived by Jonah Berger, author of *The Catalyst*, and was selected among others using criteria determined from interviews and literature reviews. This criterion was: to give the community a sense of ownership, generic enough to be tailored to each school, specific enough to give actionable advice, and have a way to evaluate and share progress regularly and easily.

The REDUCE framework has five main components: to reduce **Reactiveness**, ease **Endowment**, shrink **Distance**, ease **Uncertainty**, and find **Corroborating Evidence**. These

steps provide detail on how to reduce the barriers to change. Once the barriers to change have been reduced sufficiently, it should be simple to make the desired changes.

- Reduce **Reactance** is about preventing a strong reaction to change.
- Ease **Endowment** is about overcoming the inertia of traditional ideas.
- Shrink **Distance** is about reducing the distance between ideas.
- Alleviate **Uncertainty** is about overcoming the fears of the unknown.
- Find **Corroborating Evidence** is about getting evidence from multiple diverse sources.

Conclusions and Recommendations

Through interviews, we were able to determine common criteria that our framework would need to address in order to be successful. These criteria were, to understand lived experiences, have the research, have an evaluation process, give the community ownership, and make it capable of being tailored to different situations. Of these criteria, we found that community ownership was the most important. Much can be done to implement a change but for it to take hold the community will need to accept the change and make it their own. This is much easier to accomplish when the community feels the change is their own because they have a stake in the success of the change. While the other criteria are important for the planning, evaluation, and fine-tuning of any new program, the community plays the largest role in the success of any program.

The REDUCE framework was identified along with many other change management frameworks, such as John Kotter's eight step model for change, in our comprehensive literature review. It stood out to use due to its heightened focus on reducing the barriers to change rather than simply overcoming them. It also offers more actionable advice in the planning and management of changes than many of the other options. Despite this, it is still able to be tailored to many different situations as needed by any particular school.

The following are our recommendations for implementing change in Victorian primary schools following the REDUCE framework:

Reduce Reactance
- Teacher forums
- Survey staff for possible changes
- Allow staff to vote on possible changes

Ease Endowment
- Highlight any relevant recent events
- Show how bad the situation is relative to others

Shrink Distance
- Start by expanding existing programs

Alleviate Uncertainty
- Focus on policy changes that can be reversed if need be
- Keep it investments low

Find Corroborating Evidence
- Create a way to rapidly share case studies and other evidence

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1. Introduction

Disadvantaged communities struggle to find support within the education system. The suburb of Broadmeadows is a community of around 12,000 people in Melbourne Australia. This community was ranked the most disadvantaged suburb in Victoria by the Australian Bureau of Statistics (ABS). Furthermore, about 34% of Broadmeadow residents above the age of 15 have not completed secondary school (compared to 24% for all of Victoria) [1]. This disparity seems to stem from a higher number of at-risk and disengaged students.

The Northern Centre for Excellence in School Engagement (NCESE) is a formal collective of Banksia Gardens Community Services (BGCS), 17 local schools in the Broadmeadows area, and the Victorian Department of Education and Training (DET). The NCESE strives to develop and implement school and community programs that support school engagement for all, including (and especially) their most vulnerable students [4]. The NCESE currently operates two Communities of Practice (CoP) – groups of stakeholders with a shared goal – with a focus on improving school engagement through more trauma-informed approaches[4]: the first is for school principals and leaders; the second is for all NCESE staff.

Image 1: Banksia Gardens Community Service

Students who have become disengaged are usually experiencing some sort of trauma that prevents them from being able to focus on their education in the same way as other children. These students can be disruptive in class, fight, and skip school entirely. In the past, schools in the Broadmeadows area have referred the students most in need to Project REAL, a program for local primary school students who have complex needs and significant barriers to learning run by Banksia Gardens Community Services. These students receive one-on-one help

and education 3 days a week. Families also receive various forms of support, including supported access to various government and non-government service providers. This program has been able to work with about 10 children per year and has had considerable success in engaging these students with the academic system. However, this support is only available to the select few most in need.

Schools wish to be able to run similar programs so that support can be offered to the entirety of the student body. Project Teams from Worcester Polytechnic Institute have previously worked with the NCESE on three projects that described existing frameworks and best practices to help these students succeed in their original school system. The problem is that in spite of knowledge about best practices, it has been difficult to integrate these practices into school settings.

Image 2: Project REAL

This project will present options that might inform a framework for implementing trauma-informed practices within local schools and will include a system to support students of all risk levels within the same school. It will also include best practices for the implementation of said changes into the current system. This model may help the NCESE to identify and implement their desired changes into their network of local schools. These changes will help many at-risk students who were not reached before due to the limited capacity of the system, and destigmatize the most at-risk students as they will be able to be kept entirely within the system rather than partially removed from it.

2. Background

Student disengagement is a major problem facing schools in the Broadmeadows area. This is a community that, historically, has been socially, economically, and politically disadvantaged, with the Australian Bureua of Statistics ranking it first in terms of disadvantage (ABS, 2016). This contributes to nearly 1 in 3 young adults not completing secondary school [1]. The following sections explore what is being done locally to combat these problems as well the general theory used around the world in similar cases.

The Australian education system is split up into four sectors:

- Primary school: seven or eight years, starting at Foundation (kindergarten/preparatory/preschool) through to Year 6 or 7
- secondary school: four years from Years 7 or 8 to 10
- senior secondary school: two years from Years 11 to 12
- tertiary education: includes higher education and vocational education and training (VET).

State and Territory Governments are responsible for infrastructure and maintenance funding, the payment of teachers, principals and non-teaching staff, and the administration and management of all resources within schools. The key Australian Government agency responsible for national education policies and programs is the Department of Education and Training (DET) whose responsibilities include early childhood, schooling, higher education, and higher education teaching and research

The Australian Government, primarily through the Department of Education and Training (DET), provides funding and regulation support to early childhood education and care centers such as preschools and kindergartens and partial funding of government schools and majority funding for non-government schools. Primary and secondary schools in Australia are either government or privately funded. The Australian Government is responsible for allocating funding to States and Territories to support service delivery and reform to meet nationally agreed outcomes as well as ensuring that the funding arrangements for the non-government school sector and schools are consistent with, and support the responsibilities of the States and Territories in regulation, educational quality, performance and reporting on educational outcomes.

2.1 Disengagement in Broadmeadow Schools

Schools in the Broadmeadows area have an increased number of disengaged students, typically in Australia 80-90% of all students are actively engaged or "Tier 1" students, 15% of students are passively disengaged or "Tier 2" students, and 2-5% are actively disengaged or "Tier 3" students. However, in Broadmeadows about 50-60% of students are Tier 1, 35% are Tier 2, 5-8% are Tier 3, and principals have noted the emergence of Tier 4 students who causes major disruptions in classrooms and many problems for the schools.

As discussed previously, the Broadmeadows area is highly disadvantaged socially, economically, and politically. This can play a part in the problem of disengagement in schools, In Broadmeadows 57% of language spoken at home is not English, compared to 22% of the rest of Australia (2016 Census QuickStats, n.d.), this presents a possible language barrier in schools as the education system is English based. This extends into school as well and is shown in a 2016 census that says 30% of Broadmeadow students did not complete their Year 12 education, compared to all of Victoria where only 23% did not complete Year 12 education (2016 Census QuickStats, n.d.). It was also found that approximately 34% of household income in Broadmeadows is less than $650 a week. The poverty line in Australia for a couple with one member in the workforce, and one child is about $885 per week. This means that roughly a third of the families in Broadmeadows find themselves living near poverty. This can make it hard to find programs for their kids if they are struggling in school.

2.2 Adverse Childhood Experiences (ACE)

Adverse Childhood Experiences, or ACEs, are traumatic experiences that are experienced at a very young age. According to the United States Center for Disease Control (CDC), 1 in 6 adults experienced 4 or more types of ACEs (CDC, 2021). The study also found that this number did not vary significantly in different communities. It also linked ACEs to 5 of the top 10 leading causes of death in the United States. ACEs have numerous effects in both the short and long term. Over the short term, it is common for children to exhibit fight, flight, or freeze reactions to the trauma as they react to it. These reactions can also lead to the student becoming disengaged from the school system. Over the long term, ACEs put children at much higher risk for depression, substance abuse, and many more issues in their adult life. Students who have recently had a traumatic experience tend to act out in a few ways. The first and most obvious would be acting out in the classroom. These students often become combative with peers and teachers. This can manifest as both verbal abuse and physical aggression. Students can also exhibit a freeze reaction. This is where they stop interacting with peers or teachers in any meaningful way. This also often causes students to stop paying attention in lessons. The final typical reaction is the flight reaction. These students will frequently skip school entirely.

Studies have shown that the most effective ways of avoiding the detrimental long-term effects of ACEs are with support and counseling (CDC, 2021).Without this support, children have low chances of being able to make significant progress in their recovery. One study that compared the improvement of children facing ACEs from within and outside of a trauma-informed network, found that students improved more within a trauma-informed system using a points system to quantify improvements (Greeson et al.,2014).

2.3 Science of Learning and Development

The science of learning and development, or SOLD, studies how best to teach and develop children. This approach differs from more typical approaches to the study of education by attempting to apply scientific principles to the field. This involves an increased effort to find quantifiable results and produce repeatable results, this is what separates it from typical approaches as this allows SOLD to change as more research is done. SOLD most often studies the psychological impacts different teaching methods have on the development of students. Through these studies, scientists hope to identify the most effective ways to teach young students. So far, SOLD has produced five main principles of teaching and learning.

The first is that school and classroom structures should be designed to create and support strong attachments and positive relationships with adults and children. These relationships should provide both academic and social-emotional support to assist the children in developing appropriate skills, emotional security, resilience, and agency (Darling-Hammond, Flook, Cook-Harvey, Barron, & David Osher, 2020). When these relationships are supported, it helps children to trust the adults and their teachers. This trust leads to increased feelings of safety and when students feel safer, they learn better. It also teaches young students to trust adults, which can particularly help students facing a traumatic situation at home who may be losing faith in adults. For those students, it can make recovery from a traumatic situation significantly easier.

The second principle is that schools and classrooms should be developed as physically and psychologically safe spaces for children. Students need to feel they belong and teachers need to know their students so they can respond to the specific needs of a child. As discussed above, there is widespread consensus that students learn most effectively when they feel safe. Teachers play a massive role in ensuring that students feel safe in the environment by knowing their students well enough to know when something is wrong. When teachers are able to reach out to students who are struggling it can help to create an environment where students feel protected by their teacher.

The third principle is to create rich learning experiences and knowledge development. "Students learn best when they are engaged in authentic activities and are collaboratively working and learning with peers to deepen their understanding and to transfer knowledge and skills to new contexts and problems." [22] SOLD looks to accomplish this by creating structures

that foster a rich learning experience, by offering curriculum and programs that support problem-based learning around relevant tasks that are collaborative, performance assessments, and tools for learning about students' experiences, interests, strengths. This also relates back to the first principle, by building a relationship of trust between students and all the faculty in their life, students will feel safer around the school staff. In an environment without trust between students and faculty, students will feel vulnerable. This vulnerability can hurt development and productivity in the classroom.

The fourth principle is development of skills, habits, and mindsets, SOLD states that learning is interconnected. There is not a math part of the brain that is separate from the self-regulation or social skills part of the brain. For students to become engaged, effective learners, educators need to develop students' content-specific knowledge alongside their cognitive, emotional, and social skills. These skills, including executive function, growth mindset, social awareness, resilience and perseverance, and self-direction, can and should be taught, modeled, and practiced just like traditional academic skills and should be integrated across curriculum areas and across all settings in the school. [22]

The final principle is to develop integrated support systems. All children need support and opportunity. And all students have unique needs, interests, and assets to build upon, as well as areas of vulnerability to strengthen without stigma or shame. Thus, learning environments should be designed to include many more protective factors than they currently do, including health, mental health, and social service supports as well as opportunities to extend learning and build on interests and passions. Building comprehensive and integrated supports will tip the balance toward an environment where students feel safe, ready, and engaged. Having comprehensive and integrated supports in place can allow schools to extend learning; enable safety and belonging; and address students' unique health, mental health, and social service needs.

These principles attempt to create the most conducive environment and circumstances to aid student learning. When these conditions are not met, students are vulnerable to feelings of anxiety and unease. These feelings prevent students from being able to effectively learn because while these feelings persist the students are not able to fully focus. When steps are taken to account for SOLD practices, schools produce higher academic achievements among their students as well as form better relationships, which can aid them in all aspects of their lives.

2.4 Trauma-informed education models

Trauma-informed education is a style of education that tries to accommodate students who may be experiencing trauma at home. This is most often achieved through training school staff to recognize when a student is exhibiting signs of trauma, and then having a framework to refer those students to get the help they need.

We can gain a deeper understanding of trauma-informed education by looking at different models. Attachment, Regulation, and Competency Model (ARC), Berry Street Education Model (BSEM), Collaborative for Academic, Social, and Emotional Learning (CASEL) Framework, and The Positive Behavior for Learning (PBL) framework are a few different approaches to trauma-informed education.

BSEM focuses heavily on the teachers, providing education and development to "increase engagement of students with complex, unmet learning needs and to successfully improve all students' self-regulation, relationships, wellbeing, growth and academic achievement" (Berry Street, 2022). Some of the BSEM outcomes are academic and social-emotional growth, greater ability to maintain school-based relationships, decreased school incidents, and increased teacher knowledge.

ARC is both used on an individual level and as an organizational framework. ARC targets engagement in the following areas: Attachment, Regulation, and Competency.

Attachment focuses on strengthening the care system around children through the following three points.

1) Supporting youth in developing an awareness and understanding of feelings, body states, and associated thoughts and behaviors;

2) Helping youth develop increased capacity to tolerate and manage physiological and emotional experience; and

3) Enhancing tolerance for and skill in building a relational connection.

Regulation emphasizes cultivating youth awareness and skill in identifying, understanding, tolerating, and managing internal experience through the following points (ARC, 2022).

1) Supporting youth in developing an awareness and understanding of feelings, body states, and associated thoughts and behaviors;

2) Helping youth develop increased capacity to tolerate and manage physiological and emotional experience; and

3) Enhancing tolerance for and skill in building a relational connection.

Competency focuses on positive decision-making by using the following points.

1) Increasing opportunity for choice and empowerment, and skill in recognizing choice points and in affective decision-making; and

2) Identification and exploration of a range of aspects of self and identity, and building coherence through the development of narrative around key life experiences, including traumatic exposures.

CASEL works to foster knowledge, skills, and attitudes across five areas of social and emotional competence. These five areas are self-awareness, self-management, social awareness, relationship skills, and responsible decision-making. The CASEL framework also establishes equitable learning environments and coordinates practices across four key settings that support students' social, emotional, and academic development.

The CASEL framework provides a foundation for schools to use evidence-based Social and Emotional Learning (SEL) strategies in ways that are meaningful.

These models and many others operate on the same basic ideologies. They all implement some sort of social belonging, engagement, and attachment, allowing for emotion identification, regulation, expression, and development of identity and choice.

The Positive Behavior for Learning (PBL) framework supports schools to improve social, emotional, behavioral, and academic outcomes for students. Schools can use PBL to analyze and improve learning and behavior outcomes, select evidence based practices for student support and intervention, and provide support for staff in maintaining consistent and proactive school wide systems and practices.

PBL provides a model of support for all students, consisting of 3 tiers of intervention. The tiers represent levels of intervention. The tiers do not represent students and students should never be described as 'a red zone student' (in the PBL model tier 3 students are represented by a red area at the top of a triangle). It is important to note that students requiring Tier 2 and Tier 3 interventions receive, and are continuing to receive, the same level of Tier 1 support as other students. Tier 2 and 3 interventions are only effective when Tier 1 foundations are strong.

Tier 1: 'Universal' supports, school-wide interventions for all students, are the foundation for PBL. Interventions are provided to all students across academic, emotional and behavior dimensions of learning. The focus of Tier 1 intervention is on all students and staff across all settings-whole-school, classroom, and non-classroom. Some examples of Tier 1 supports are:

- explicit teaching of behavioral expectations and social-emotional competencies
- clear boundaries in place
- high rates of acknowledgement for expected behaviors
- effective instruction
- active supervision

Tier 2: 'Targeted' interventions support approximately 15% of students in a typical school who are not responding to Tier 1 and who have moderate, ongoing behaviors of concern, whether that be social, behavioral, or academic. The focus of Tier 2 is to reduce the number of existing students requiring additional support, bringing these students back to Tier 1. Examples of Tier 2 supports include:

- daily check ins
- academic modifications
- mentoring support
- social skills groups

Tier 3: 'Intensive' interventions support approximately 5% of students who have not responded to Tier 1 and Tier 2 interventions. Tier 3 supports may require involving highly individualized interventions to support a tailored learning program. The focus of Tier 3 is to reduce the intensity and complexity of existing individual student's situations. Tier 3 interventions and supports involve:

- a case management approach
- a process for assessment, such as functional behavior assessment (FBA)
- individual behavior support planning
- ongoing monitoring and review.

Student behavior support plan accounts for the specific needs of the student, while detailing the rational and specific strategies used. Staff does this by adopting preventative strategies to prevent situations or behavior from escalating. When specific behavioral risk is identified staff use evidence based, positive, proactive, and preventative strategies. Such as:

De-escalation involves using the right strategy, at the right time, for the right student. What works for one student may not work for another. Strategies that school staff might employ include:

Acknowledging the student: staff validate the student's emotions, confirm to them that it is legitimate to feel upset, angry, exhausted, or betrayed.

Agree with the student: if it is possible to do so. Staff try to find some truth in what is being said or expressed by the student. This reduces the conflict and can assist in being solution-focused, preventing escalation. Once the conflict is over and the immediate risk has been managed, it is possible to find time to explore the situation as a whole.

Clarifying: if a student is very upset, it can be difficult for them to express what they are saying meaningfully. Using statements to help clarify meaning, rather than assuming what the student means can help staff in de-escalating situations.

Offering choices, options, and boundaries: this means defining what the options are and identifying the possible natural consequences for the student, dependent on the decisions they make.

Distracting the student: for example, staff might change the topic, make a noise, deliberately drop some books, or ask a question about something of interest to the student. Distraction can be a very effective short term solution for preventing escalation of a situation.

The theory of SOLD runs parallel to that of trauma informed education. Trauma informed education, like SOLD, aims to create a safe environment for students that allows them to develop positive relationships, social-emotional skills, and better conditions for learning and development. SOLD framework aims to do this through its 5 key elements and their structure and practices. While the concept of trauma informed education is a more generalized approach.

2.5 NCESE's Work in Victoria

In 2017, the Banksia Gardens Project Re-engagement in Education and Learning (REAL) was launched with the idea to re-engage students who have complex or challenging needs. Project REAL supports 6-7 students at any one time, and has accepted around 45 students since it commenced operations in 2017. Banksia Gardens' method to help at-risk students is by incorporating flexible learning options (FLO) into the school system. These are typically out-of-school options that students can be referred to on a case-by-case basis. Educators involved with the FLO are trained more effectively in how to help these students and FLOs typically provide an opportunity for educators to work with the student one-on-one. This has made them an effective tool; however, students will eventually have to return to school, and this may further stigmatize these kids by separating them from the rest.

Upon seeing that Project REAL was effective, schools wanted to provide the same support from within their schools. From this NCESE was created to help schools do just that, focusing on tier 3 students, as Project REAL does. The approach Project REAL uses with its students, families and schools represents a local adaptation of theoretical and practice-based components from: Trauma-informed practices (and Trauma-Informed Positive Education), the ARC Framework, and Social and Emotional Learning (CASEL Framework). Currently the NCESE works with 17 different schools in the Broadmeadow area, most of which are primary schools. They provide outside training to their Communities of Practice. These seminars educate teachers on trauma informed practices and gives them the knowledge to use those methods in classrooms and allows principals to make informed decisions to help institute trauma informed education. In 2022 they offer seminars on:

- The impact of trauma informed learning and development
- Working effectively with children with ADHD

- Becoming an excellent tier 3 teacher
- Restorative justice
- Critical incidents and de-escalation
- Trauma informed positive education masterclass
- The importance of SEL and executive functions

2.6 Change management in a school setting

When trying to implement change into a school it is important to think about how to implement and manage that change. This is called change management. When school systems implement change, it is critical that they have a structured and organized system to implement change in their schools. This includes a clear core mission, budgeting, proper training for all staff, communication amongst staff, and persistence in achieving set goals.

2.7 Obstacles and sustainability of trauma-informed practices in schools

As expected, there are many obstacles to implementing change. The change might fail due to losing sight of the core mission. If the school isn't focused on the reason for implementing the change, their objectives can fall off course. Another challenge to implementing change in a school setting is a lack of funding. While this usually isn't something that schools can control, it has a major impact on the success of the changes. Insufficient funds lead to program and staff cuts causing the system to fail.

One of the most common obstacles to implementing trauma-informed practices is maintaining staff support and morale. There are many persistent myths around trauma-informed practices. Many school faculty believe that grades and test results would drop due to the increased focus on relationships in the curriculum. However, in practice, trauma-informed policies have been shown to improve the academic performance of the schools they are implemented in. This is because students are better able to learn due to the school environment becoming safer and more supportive. The most effective way to convince faculty of the benefits of trauma-informed education is comprehensive education and training in the field (Holmes et al., 2015). The training, in most cases, has been shown to convince skeptical faculty on the benefits and disprove the myths. This makes education the most powerful tool in rallying support for trauma-informed practices, and with more support often comes greater staff morale.

Change in school settings ultimately means nothing if the change is not able to be maintained. When trauma-informed support systems are simply forced into a school setting without careful thought and planning the school will see very few of the benefits. Poorly planned programs are likely to run over budget, often don't educate faculty enough about the approach, and still don't provide at-risk students with the help that they need.

The effective implementation of a trauma-informed support system within a school will usually involve the hiring of new staff. The most necessary staff investment is in counseling. Most models that schools implement involve the use of counselors to interact with, help, and identify students experiencing trauma (Berger & Martin, 2021). However, without a plan for these hires, schools may hire unnecessary staff which could lead to budget overruns. This can undermine support for the program from administrators; which could ultimately lead to the program being cut to save money.

While support from the administrators is critical, it is also critical to have support from the general faculty. Lack of support from the faculty often leads to lowered morale (Berger & Martin, 2021). This could lead the faculty to apply pressure on the school to cut the program as they are forced to adhere to principles they don't believe in. This problem is often able to be solved through the education and training of the faculty. Education on the topics covered has been proven to be the most effective tool in convincing a reluctant faculty that trauma-informed education is a better approach to education. This is why most models involve initial training as well as yearly training. This training not only serves to educate the faculty on how best to adhere to this new way of education but also serves as a key tool in procuring support for these programs.

When trauma-informed models are implemented poorly in the ways described above, they can be short-lived or simply not effective. A rampant budget for the program may allow students to receive help temporarily but ultimately the program will be forced to end. If a program never takes the time to garner support from the faculty the program will likely not be effective to begin with. This illustrates the importance of planning the implementation of a trauma-informed program. When planning, the most important items to consider are investments in hirings and facilities, as well as the education of the faculty.

3. Methods

The NCESE was in need of a framework to help guide the implementation of trauma-informed practices in the Broadmeadows school system. The NCESE was specifically interested in how these practices have been implemented in schools and organizations within the United States and how these implementation strategies compare to similar programs/frameworks across the world. This was to help determine best practices for implementing these changes because little research has been done in this area.

In this chapter, we describe the methods we used to ultimately achieve our goal: to *help* the NCESE to achieve their goal of changing the educational approach of the Broadmeadows school system to a more trauma-informed approach by creating a framework to further the adoption of these strategies. We organized the project around two main objectives:

1. Understanding the obstacles to and strategies through which to implement trauma-informed practices in school systems in Massachusetts and Victoria.
2. Propose a framework for implementing change that can be applied to Broadmeadows primary schools.

In addition to this report, we created two deliverables. First, a booklet to summarize our findings for the NCESE. This booklet contains useful information on change management as it relates to the Broadmeadows schools. Second, we created a form for members of the Communities of Practice to fill out when they successfully implement change in their school.

3.1 Understanding strategies or pathways through which to implement trauma-informed practices in school systems in Massachusetts and Victoria.

The first step in achieving our goal was to thoroughly understand the topic matter so we could best help the NCESE. We needed to understand how trauma-informed practices were implemented in the United States and Australia and how and why these changes were successful. To do this, we needed to find the organizations that have already accomplished – or worked towards – what the NCESE is trying to do.

Our first step in achieving this objective was a semi-structured interview in Massachusetts. We reached out to 6 different people in Massachusetts who had a strong background in effecting change in schools. We were only able to schedule a meeting with one expert, Dr. Jen Carey. She is the Founding Executive Director of the Worcester Educational Collaborative (WEC). The WEC has done work to implement trauma-informed education into Worcester public schools. Because of this, Dr. Carey was an excellent source of knowledge on all facets of our project.

This interview took place in Week 2 of our project and was on Zoom. We conducted the interview as a team of three. The following are the research questions we asked Dr. Carey.

- What were some barriers to implementation you ran into and how did you overcome them?
- Is there something you wish you knew when you first started implementing change?

- What is most important for us to understand?
- Do you have any general advice for us?

After the interview, we synthesized our notes into useful data to be used in our research and deliverables.

In addition to our interview in Massachusetts, we also conducted a joint interview with two people in Melbourne. Since many of our Massachusetts contacts did not work out, we decided to conduct another interview while in Melbourne with experts in the field. The experts we interviewed are Liam Leonard and Debra Parkinson. Liam is currently a social policy consultant and Adjunct Research Fellow with Monash University. Before this, he has done a lot of research and work on making schools a safer place for LGBTQ+ students with Gay and Lesbian Health Victoria. Debra Parkinson is the Director at Gender and Disaster Australia. Before this, she also worked change in local schools relating to high dropout rates among the students. Because of this, they were both excellent people to interview for this project. We did their interviews together because they are currently working together on a project at Gender and Disaster Australia.

This interview took place later in the term on Zoom. We conducted the interview as a team of three. The following are the research questions we asked Liam Leonard and Debra Parkinson.

- What were your biggest obstacles to implementing change?
- How were you able to overcome those barriers?
- What are key elements to change management? In schools or other organizations.
- Is there something that you wish you knew before you started implementing change in school systems or in organizations in general?
- What, if anything, had to change in your plan as you began to introduce your program?
- Do you have any general advice for us? Anything that we did not cover in our questions?

3.2 Propose a framework for implementing change that can be applied to Broadmeadows primary schools.

The second part of completing our objective centers around our framework for change. We wanted to give the NCESE and the Communities of Practice a concrete and practical way to implement their desired changes.

We reviewed the literature on change management and discovered *The Catalyst* by Jonah Berger. The crux of this book is the REDUCE framework for change. We will delve into heavy detail about this framework in the later chapters of this report. Simply put, the REDUCE framework is all about removing the barriers to change – opposed to trying to force through.

Using this framework, we also created a form for the NCESE. This form focuses on the "Corroborating Evidence" section of the REDUCE framework. It is a google form that will be distributed to the Communities of Practice, mainly the principals. They can fill out this form when they successfully implement a change in their school that they think other schools would

also benefit from. The principals can detail exactly what the change was and how they implemented it so that another principal or school could replicate their positive results. This form can be found in Appendix B.

4. Results and Analysis

In this section we detail the results of our methods. First, we detail the insights gained from our interviews with professionals in the field. Then, using this advice, we created the requirements for our final framework to meet; we also completed a comprehensive literature review to identify the ideal framework according to those requirements. That literature review revealed the REDUCE framework as the most suitable option for schools in the Broadmeadows area.

4.1 Lessons From Experts in the Field

We learned multiple things from the interviews that we would later incorporate into the final framework. The first piece of advice that was given in the interviews was to understand lived experiences. One major misstep that can be made when trying to implement change in any organization is to ignore the voices of the people that you are trying to help. If they do not like the proposed change, and you do not listen, the change will struggle to take hold as the people it is meant to help fight against it. Ensuring that you understand the experiences of the people you are trying to reach gives you the best opportunity to propose changes that will make a difference as well as be accepted by the community.

The second piece of advice was to establish a comprehensive evidence base. When proposing a change it is important to be informed on the relevant topics. This increases your credibility to suggest that changes be made. It is also helpful because it allows the evidence base for the change to be spread among those affected. This allows everyone to understand why things are changing which can reduce the resistance to change within a community.

The third piece of advice was to have an evaluation process to provide feedback on the success of the change or program. By building an evaluation process it is possible to gather a larger evidence base faster. This evidence can be used to show the efficacy of the program and allow for targeted change and refinement. This is important to the final framework because it allows it to accrue evidence of its efficacy rapidly as well as allowing changes to be adjusted and fine-tuned as needed.

The fourth piece of advice was to give the community ownership. This was emphasized especially in each interview. For change to take hold within a community, the community must accept the change. Giving the community ownership of the change gives them a stake in its success. This usually means they will work harder to ensure the success of the change. So any effective change management framework will need to include a way to give the community a sense of ownership over the change.

The final piece of information that was gathered from the interviews was that each community is different. There is no one-size-fits-all plan that can be used to implement change in any community. Therefore any framework developed needs to be versatile enough to be able to be used in different situations.

4.2 REDUCE Framework

The REDUCE framework's core purpose is to show how to successfully change someone's mind. In this context, it is being applied to organizational change, particularly within Victorian schools. It serves two purposes in this setting; the first is to convince new schools that the changes are necessary, and the second is to provide a framework for schools attempting to implement change to follow. This framework was first conceived by Jonah Berger, author of *The Catalyst*, and was selected among others using criteria determined from interviews and literature reviews. This criterion was: to give the community a sense of ownership, generic enough to be tailored to each school, specific enough to give actionable advice, and have a way to evaluate and share progress regularly and easily.

One other popular framework that was considered is the Kubler-Ross model. This model was created by Elisabeth Kubler-Ross based on her, more famous, five stages of grief. She offers that people's reactions to change are not that different from their reactions to grief and hardship. The five stages on the Kubler-Ross change curve are Denial, Anger, Bargaining, Depression, and Acceptance [21]. These stages are used to describe the attitude of people who are undergoing a change. This makes it a useful tool for benchmarking progress in completing a change, but it offers little advice on how to go about making changes.

Another model for change that was considered was John Kotter's 8-Step Model for leading change. This model was created using observations of executives and other leaders as they tried to make changes within their organizations. The 8-steps posed by the model are: create a sense of urgency, build a guiding coalition, form a strategic vision and initiatives, enlist a volunteer army, enable action by removing barriers, generate short-term wins, sustain acceleration, and lastly, institute change [20]. These steps do offer concrete steps that can be used to build a real strategy for change; however, this framework is extremely driven from the top down. While the REDUCE framework is also somewhat top-down, this framework puts the agency for change squarely in the hands of the leader. This will prevent the community from gaining a sense of ownership because they are not as active in leading the change.

The REDUCE framework will be explored in-depth in later sections, but in short, the steps it proposes are: to reduce Reactiveness, ease Endowment, shrink Distance, ease Uncertainty, and find Corroborating Evidence. These steps provide detail on how to reduce the barriers to change. Once the barriers to change have been reduced sufficiently, it should be simple to make the desired changes.

4.2.1 Reduce Reaction

When people feel that the way they do things is being questioned they can become defensive. The more defensive they are the more unlikely it is that they can be convinced to accept a new change. That is why this block focuses on limiting the reaction produced by the suggestion of change. By preventing a strong defensive reaction it becomes significantly easier

to convince someone of something. The trouble is that it is very hard to suggest changes without triggering a person to become defensive.

The first suggestion that this step poses to accomplish this, is to understand the roots of the problem. This does not directly reduce their reaction to the posed change, but their reaction could be even stronger if they do not feel that you understand the problem. How would you feel if someone who barely knew what you did came to you and started telling you how to do your job. By ensuring you have a thorough understanding of the problem you at least make yourself credible enough to speak on the problem. This way, if there is a strong reaction, it will be about the suggested change rather than at a person. This is what the rest of this section will address.

The second suggestion is to highlight a gap. Many people want change and talk about it while they make no effort to change the things that they wish to change themselves. This could be a smoker discouraging smoking but not quitting himself or a teacher who advocates for trauma-informed education but makes no attempt to implement these changes within their own classroom. When this is pointed out to someone it can invigorate them to be part of the change because it is something they have said they wanted.

The next suggestion is to ask people what changes should be made rather than tell them what changes you are making. This reduces their reaction because they do not realize they are being told anything, but rather that they are being listened to. This builds a sense of ownership of the change because staff requested it and so many people may feel that if it does not succeed it may reflect poorly on them. Due to this, staff are more likely to work harder to ensure the success of the program. This suggestion is also particularly helpful when used with the previous suggestion because then control is not completely relinquished. This would take the form of finding staff who talk about the changes that you want to implement and asking them to suggest changes. Since they already have the ideas you want, you get what you want and they still feel ownership of the idea.

The final suggestion is to provide multiple options. This is somewhat similar to the previous suggestion but instead of asking you are giving them choices. Since they are making their own choice it has much the same effect and increases the sense of ownership over the eventual change. In practice, this could take the form of allowing staff or parents to vote on changes. This could also be used with the previous suggestions by compiling a list of changes from community members and posing the options on that list to be voted on by the community. All of this once again focuses on creating a feeling of agency for community members with regard to the change being made.

4.2.2 Ease Endowment

This block explores the thought that ideas have inertia. It suggests that the current ideas and culture have a significant amount of inertia behind them or else they would not be so intrinsic to the community. To implement change this inertia has to be overcome in order to change the ideas and culture of the community. In reality, this inertia can take the form of past investments in staff, materials, or facilities. It can also be tied to the sunk-cost fallacy where an

individual is unlikely to change because they have already committed significant resources to do something that may or may not be effective.

The first thing that must be done to overcome this inertia is to convince them that any change even needs to be made. To do this, one suggestion is to show the cost of inaction. One common argument that is used is that the cost of making the change will outweigh the benefits of the change. What this line of thought fails to take into account is the continued cost of inaction. Showing that there is a problem and that the problem will continue to cost the organization resources. When this is shown the cost of the transition becomes more palatable because the savings are more clear. It is worth noting that the cost does not have to be monetary though it often is. Costs could take the form of time, staff, or students.

Once the problem has been established and some action has been taken the next suggestion is to make a return to the status quo impossible after a certain point. As the Kubler-Ross model shows, anger and bargaining are likely to occur during the process of the change. If the change is not committed to this could lead to half-hearted implementation, as they can always go back if it fails so why try, or a complete return to the status quo. By making a commitment point, wherefrom that point on the changes are irreversible prevents progress from being lost and again gives the community more reason to root for the success of the change. This will once again lead to the community feeling more ownership of the program.

4.2.3 Shrink Distance

This block suggests that there is a distance between ideas. The greater the difference between ideas the harder it will be to move a person from one idea to the other. In the organization that is trying to be changed they will hold many ideas; however, to fully implement change you will have to bring everyone holding opposing ideas to the ideas driving the change. If the distance between these ideas is too great it is unlikely that people will be able to be convinced of the change. That is why this block explores ways to shorten the distance between the opposing ideas and the new ideas. By reducing the distance it is made significantly easier to convince someone of an idea.

The first way to shrink the distance is to start on common ground. Instead of starting the discussion from two opposing viewpoints, start from an already agreed belief. This can reduce the perceived distance between the ideas by showing that these ideas can agree on some things. Once an agreement has been found on one related topic it is often easier to find agreement on another.

The second method is similar, it is start by compromising. Start by discussing and seeing how far a person can be moved away from their idea then compromise with them there. Even if they don't fully believe in the change, they may be able to be moved far enough to give the change some support. This also raises community support because it is involved. If there is a discussion and a compromise they will feel more involved in the process and like that they have a voice in the process. Once again this will make them work harder to ensure the success of the program because they feel they have some stake in its success or failure.

The last method to shrink the distance is to slowly move them towards the idea by moving them towards multiple closer ideas until eventually, they reach the final goal. Because each time you are not asking them to move very far they are more willing to change their ideas. Then after some time, you ask them to move again, keeping the distance short. After making many moves over a period of time you will get them to the final goal without encountering as much resistance as if they had covered the full distance in one go. This can be done most efficiently when used with the previous method. By finding how far they are willing to go each time it is possible to minimize the number of intermediate steps required.

4.2.4 Ease Uncertainty

This block focuses on decreasing a person's reluctance to change due to uncertainty over the outcome. The familiar is comfortable and making changes means being uncomfortable for a time as you move towards the unknown. This discomfort stems from the fear of the unknown. When making changes it is impossible to know exactly how the changes will play out. There will always be some amount of risk involved in making changes. This means that it is impossible to remove uncertainty from any major change, and so this block discusses ways to manage the uncertainty in a way that is more palatable for those affected by the change.

The first way to ease uncertainty is to make sure information on the changes is readily available from people who have already made the change or know a lot about it. This can give someone a better understanding of the effects that the change will have and alleviate some of the uncertainty they were feeling. What this could look like in practice would be free workshops covering the topics of the change. If the change that is being implemented is trauma-informed education, workshops on the topic of trauma-sensitive teaching might help them understand the changes that are being made.

The second method is to reduce the upfront costs of the program. This method is based on the idea that expensive changes inherently have more risk than cheaper ones, and by reducing the risk it becomes easier to convince people to adopt the change. So by reducing the upfront costs of the change, it becomes less risky, and while there is still uncertainty people are more willing to take a small risk than a large one. This is because there is less to lose and so if the change proves unsuccessful they can know that not as much will be lost.

The final way to alleviate uncertainty is by making the change reversible. Like the previous method, this does not reduce the risk, but rather makes the risk smaller. Uncertainty is less daunting when you know that if it does not work out you can always go back. The challenge with this method, however, is balancing it with the need to commit at some point as discussed in the second block on Easing Endowment. The simplest way to try and incorporate both would be to make reversible changes that become permanent after enough time has passed that there is little uncertainty left. The proper balance of these two methods would likely vary from school to school.

4.2.5 Find Corroborating Evidence

The last, but possibly most important, block of the REDUCE framework is to find Corroborating Evidence. People will always want to see evidence in support of a proposed change. And so a critical part of any change management strategy is a way to provide evidence in favor of the change. Initially, this would have to take the form of theory or small-scale studies if the change being made is very progressive. This evidence is still valuable in bringing about change but not all evidence is created equal.

Once early adopters have implemented the change there must be a way for them to share the results of the change with those considering making the same change. Evidence provided in this manner will be considerably more convincing because it is practically gathered and provided by people that would be considered their equals. Data gathered in a controlled environment can be viewed skeptically by those practicing in the field, but data provided by others in the field on the actual implementation of the change is much harder to dismiss.

This effect can be compounded as more schools adopt the change and provide more information. As practically gathered evidence gathers from multiple sources it becomes even harder to dismiss. Sharing and using data could also help to build a sense of community by creating a sense of collaboration between multiple organizations. This data can also be used to evaluate the changes made in a fair and impartial manner.

5. Conclusions and Recommendations

Over the course of the last semester, our group has been researching trauma-informed education and change management literature in order to identify a framework for change to help disadvantaged schools in the implementation of trauma-informed education. We found that while there is growing consensus and support in the field of trauma-informed education; there is very little consensus on the subject of change management. Many change management frameworks discuss the obstacles to change and how to overcome them or reduce them. We chose and recommend the REDUCE framework as the most suited to the task due to its focus on reducing the barriers to change as well as fulfilling the criteria as determined from interviews.

Through interviews, we were able to determine common criteria that our framework would need to address in order to be successful. These criteria were, to understand lived experiences, have the research, have an evaluation process, give the community ownership, and make it capable of being tailored to different situations. Of these criteria, we found that community ownership was the most important. Much can be done to implement a change but for it to take hold the community will need to accept the change and make it their own. This is much easier to accomplish when the community feels the change is their own because they have a stake in the success of the change. While the other criteria are important for the planning, evaluation, and fine-tuning of any new program, the community plays the largest role in the success of any program.

The REDUCE framework was identified along with many other change management frameworks, such as John Kotter's eight step model for change, in our comprehensive literature review. It stood out to us due to its heightened focus on reducing the barriers to change rather than simply overcoming them. It also offers more actionable advice in the planning and management of changes than many of the other options. Despite this, it is still able to be tailored to many different situations as needed by any particular school.

5.1 Reduce Reactiveness

As explored more thoroughly in the results section, this point is all about preventing a strong reaction from the person or people whose mind you are trying to change. There are many ways to do this; schools, in particular, could accomplish this through staff forums, surveys, and allowing staff to vote on policies.

Staff forums and surveys would give teachers a voice to communicate what they feel should be changed. If these goals align with the administration then they can be used and the staff will likely react in a positive way if there is a reaction. This is because the staff feels they are being listened to, and because of this they will also feel a sense of ownership over the resulting changes. With this sense of ownership, the staff are likely to work harder to ensure the success of the program. The forums and surveys also provide a good way to evaluate the success of changes that are being rolled by the people most affected. This information could be

used to fine-tune the change to the needs of the community. Allowing the staff to vote on policies has much the same effect as the previous options; however, it gives the administration more control over the change by giving them control over the options that are available.

5.2 Ease Endowment

This point is all about overcoming the inertia of the already established culture. People usually are not aware of the issues caused by the status quo or choose to ignore them. To overcome this we recommend that any recent events that show the issue be highlighted. While some events can be tragic; they can also be used to inspire change to ensure that they never happen again. Another useful way to show the need for change is to compare your community or organization to others. This can show how many resources are being tied up dealing with problems that not everyone faces. Such a comparison can show that there is a need for change within the community.

5.3 Shrink Distance

In summary, this point focuses on reducing the distance between the opposing idea and desired idea. One of the most effective ways this could be accomplished in a school setting would be by expanding already existing programs. Because the programs are already there, the changes will feel more familiar and closer to their existing ideas. Continuous expansion of these programs over a long period of time could also result in them eventually moving quite far away from their existing beliefs.

5.4 Alleviate Uncertainty

This block focuses on overcoming the fear of the unknown consequences of a change. In practice, this can take the form of small-scale pilot programs. These are good because the small scale allows the organization to risk fewer resources as well as provides a picture of how the change looks in practice. Another step that can be taken to alleviate uncertainty is to reduce the upfront costs of the program and to make it reversible. These focus on reducing the risk associated with the change. This works because people are more willing to take a small risk because they stand to lose less while gaining much the same.

5.5 Find Corroborating Evidence

The final block focuses on the collection and distribution of evidence in support of the change. This evidence is most effective when gathered from peers rather than from studies. We recommend the use of a monthly form that allows school principals to report changes they are making as well as their effects. These surveys can be used to prepare case studies which can be distributed back to the principals to show what is being done in other schools. This removes

almost all of the uncertainty for schools that have been considering similar changes because they can see that another school has done it and the effects it had.

5.6 Final Statements

Over the course of the term we were not able to gain the access to schools that we hoped; however we were still able to complete multiple interviews with experts in the field, both in the United States and Australia. We were also able to sit in on multiple meetings between the NCESE and school principals. We are incredibly thankful to all of the professionals who were able to make time and speak with us. All of these individuals showed a willingness to continue the conversation with the NCESE in the near future in order to continue the work of this project. We hope that this project has made a meaningful contribution to the NCESE and the field of change management and that the NCESE will be able to use it to further its mission of fostering school engagement in the Broadmeadows area.

6. References

[1]   Sanders. (2021). Teaching Note-Trauma-Informed Teaching in Social Work Education. *Journal of Social Work Education*, *57*(1), 197–204. https://doi.org/10.1080/10437797.2019.1661923

[2]   Berger, & Martin, K. (2021). Embedding trauma‑informed practice within the education sector. *Journal of Community & Applied Social Psychology*, *31*(2), 223–227. https://doi.org/10.1002/casp.2494

[3]   Holmes, C., Levy, M., Smith, A. *et al.* A Model for Creating a Supportive Trauma-Informed Culture for Children in Preschool Settings. *J Child Fam Stud* **24,** 1650–1659 (2015). https://doi-org.ezpv7-web-p-u01.wpi.edu/10.1007/s10826-014-9968-6

[4]   Greeson, J. K. P., Briggs, E. C., Layne, C. M., Belcher, H. M. E., Ostrowski, S. A., Kim, S., Lee, R. C., Vivrette, R. L., Pynoos, R. S., & Fairbank, J. A. (2014). Traumatic Childhood Experiences in the 21st Century: Broadening and Building on the ACE Studies With Data From the National Child Traumatic Stress Network. *Journal of Interpersonal Violence*, 29(3), 536–556. https://doi.org/10.1177/0886260513505217

[5]   Linda Darling-Hammond, Lisa Flook, Channa Cook-Harvey, Brigid Barron & David Osher (2020) Implications for educational practice of the science of learning and development, *Applied Developmental Science*, 24:2, 97-140, DOI: 10.1080/10888691.2018.1537791

[6]   Australian Bureau Of Statistics, A. B. S. (n.d.). 2016 Census QuickStats: Broadmeadows (Vic.).
Australian Bureau of Statistics.
https://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2016/quicksta
t/SSC20344

[7]   Butt, C. (2018, March 30). Melbourne's richest and poorest suburbs: How does your area
compare? The Age.
https://www.theage.com.au/national/victoria/melbourne-s-richest-and-poorest-suburbs-ho
w-does-your-area-compare-20180327-p4z6hi.html

[8]   Banksia Gardens Community Services, B. G. C. S. (2021, October 27). About Us. Banksia
Gardens Community Services. https://banksiagardens.org.au/about-us/

[9]   Banksia Gardens Community Services, B. G. C. S. (2021b, November 1). Northern Centre for Excellence in School Engagement. Banksia Gardens Community Services. https://banksiagardens.org.au/northern-centre-for-excellence-in-school-engagement/

[10]   Stevens, J. E. (2021, July 8). Massachusetts, Washington State lead U.S. trauma-sensitive school movement. ACEs Too High. https://acestoohigh.com/2012/05/31/massachusetts-washington-state-lead-u-s-trauma-sensitive-school-movement/

[11]   Massachusetts Advocates For Children And Harvard Law School. (2016, December 8). About the Trauma and Learning Policy Initiative - (TLPI). Trauma Sensitive Schools. https://traumasensitiveschools.org/about-tlpi/

[12]   Massachusetts Advocates For Children And Harvard Law School. (2020, July 4). TLPI Publications - Helping Traumatized Children Learn. Trauma Sensitive Schools. https://traumasensitiveschools.org/tlpi-publications/

[13]   Collaborative For Academic, Social, And Emotional Learning, C. A. S. E. L. (2021, October 26). Fundamentals of SEL. CASEL. https://casel.org/fundamentals-of-sel/

[14]   Collaborative For Academic, Social, And Emotional Learning, C. A. S. E. L. (2021, October 11). What Is the Framework? CASEL. https://casel.org/fundamentals-of-sel/what-is-the-casel-framework/

[15]   Berry Street. (2022). About BSEM. Berry Street https://www.berrystreet.org.au/learning-and-resources/berry-street-education-model/about-bsem

[16]   ARC. (2016). What is ARC?. Attachment, Regulation, and Competency. https://arcframework.org/what-is-arc/

[17]   Preventing Adverse Childhood Experiences |Violence Prevention|Injury Center|*CDC*. (2021, April 6). Centers for Disease Control and Prevention. https://www.cdc.gov/violenceprevention/aces/fastfact.html

[18]   Jerald, C. J. (2005, August). *The Implementation Trap: Helping Schools Overcome Barriers to Change*. Center for Comprehensive School Reform and Improvement. https://files.eric.ed.gov/fulltext/ED494092.pdf

[19]   *The 8-step process for leading change: Dr. John Kotter.* Kotter. (2021, November 24). Retrieved May 2, 2022, from https://www.kotterinc.com/8-steps-process-for-leading-change/

[20]   Connelly, M. (2020, September 12). *Kubler-Ross five stage model.* Change Management Coach. Retrieved May 2, 2022, from https://www.change-management-coach.com/kubler-ross.html

[21]   Berger, J. (2020). The catalyst: how to change anyone's mind. Simon & Schuster.

[22]   *Overview of the Principles*. (2022). Design Principles for Schools. Retrieved April 28, 2022, from https://k12.designprinciples.org/overview-principles

Appendices

Appendix A: Interview Sheets and Questions

Australian Faculty Interviews

Questions	Notes
What do you think are the barriers to change in your school system?	
Has there recently been a big change implemented in your school system? What made it successful?	
Do you think our framework could be successful? Why or why not?	

American Interviews

Questions	Notes
What were some barriers to implementation you ran into and how did you overcome them?	
Is there something you wish you knew when you first started implementing change?	
What is most important for us to understand?	
Do you have any general advice for us?	

Appendix B: NCESE Form Questions

1. What practices are you implementing/ trying to implement?
2. What problem were you trying to solve with that practice? And why?
    - Was it a behavioral problem, academic problem, social problem, ect.
3. What changes have you noticed from this practice?
    - Can you provide any quantitative data. Changes that you may have noticed: behavioral, social, emotional, or academic. As well as inadvertent effects positive or negative that may have come about. What sort of cause and effect have you seen?
4. Why do you think this practice is or isn't working? Or why do you think it would /could work?
5. How would you like to expand upon that practice if you could?
6. Any ideas of programs or practices that you think would be beneficial
7. Other Comments