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TRAUMA-INFORMED PROFESSIONAL DEVELOPMENT: A CORE COMPETENCY FOR

K – 12 TEACHERS IN SASKATCHEWAN

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KATHERINE LEBLANC

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The future of learning.

Approval of Dissertation

The undersigned certify that they have read the dissertation entitled

**TRAUMA-INFORMED PROFESSIONAL DEVELOPMENT:
A CORE COMPETENCY FOR K – 12 TEACHERS IN SASKATCHEWAN**

Submitted by:

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In partial fulfillment of the requirements for the degree of

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Dedication

It is an honour to dedicate this dissertation to some of the most important people in my life. First, to my children, Logan and Kiana, I thank you for your support and your encouragement. I hope that you always remember that you are capable of amazing things. I am so proud to be your mom. To my own mom, Lynn Synk, who encouraged me to be a teacher, I thank you for instilling the value of reading and learning. Finally, to my husband, Earl, for without you, I would not have completed this journey. I thank you for pushing me to the finish line, for the endless support, for looking after absolutely everything when my nose was in the books and for the steady supply of tissues as I cried. Thank you for always providing a shoulder to cry on and encouraging words when I needed them most and of course, for believing in me through this process. I am looking forward to not being tied to the computer and spending more time with you and our family. I love and appreciate each of you so very much. Words cannot express how much each of you mean to me, and how blessed I am to have you in my life.

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Abstract

Teachers play a significant role in the development of children. Not only do they help to shape their academics, but they also play an important part in helping them develop socially. Teachers are tasked to stay abreast with new methods of teaching, with new technologies, and stay current with best practices in teaching. Professional development for teachers is an important part of their profession, as it allows them to stay current in teaching practices. Hilton and Hilton (2017) state that teachers have the responsibility to extend their professional knowledge through reflective practice and ongoing professional development throughout their careers. For some teachers, professional development is imposed by the division or region they work for, while others can have choice regarding areas that they wish to increase their knowledge and skills. Regardless of what professional development educators participate in, the desired outcome is to ensure all students learn and grow in a caring environment. Many students experience trauma outside of school that affects their academics, their behaviour and how they function in their learning environment. Teachers need to be aware of the effects of trauma and how trauma can manifest in students, so they can best meet their students' academic, emotional and behavioural needs. This study uses a practitioner action research approach that encourages self-reflection and allows the "systematic and inquiry into practice" (Dinkelman, 2003, p.6). By using this approach, the researcher shows how trauma-informed professional development can provide assistance to educators to better support students who experience trauma.

Keywords: trauma, trauma-informed, trauma-informed professional development, professional development, trauma-sensitive, trauma-aware, adverse childhood experiences (ACEs)

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Adverse Childhood Experiences (ACEs) – stressful, traumatic events that include but are not limited to physical, emotional or sexual abuse and neglect. This can also include witnessing violence or seeing a parent incarcerated (Kennedy, 2021).

Educators – Members of the school community who mentor, instruct, train or coach and focus on intellectual, moral and social instruction. They may not have formal training. (Hasa, 2016). This may include, but not be limited to bus drivers, teachers, educational assistants, administrators, and coaches.

Teachers - A person who holds a valid teaching certificate (Education Act, 1995).

Teacher Preparedness – Providing content knowledge, pedagogy, techniques to support teacher development and authentic training for teachers (Livers, et al., 2021).

Trauma – The result of adverse events or many prolonged events, experiences or threats that may negatively affect a person's well being (Peterson, 2018). These adverse events can include: natural disasters; human-caused trauma from war or domestic violence; accidents; medical emergencies; sudden deaths of loved ones; sexual, physical, emotional or psychological abuse and neglect; or witnessing harm to another (Jennings, 2019).

Professional Development – Providing resources, instruction, and assistance to teachers for the purpose of educational reform while building capacity, self-confidence and improving the knowledge of the teacher to perform his or her tasks (Perry & Bevins, 2019).

Professional Learning – Learning that develops the professional knowledge of teachers (Mingsiritham et al., 2020).

Trauma-aware – The ability to define trauma and have an awareness of the impact of trauma (Carter & Blanch, 2019).

Trauma-informed schools - These are safe and supportive communities that allow the students and the staff to feel safe while also building relationships with each other, regulating feelings, emotions, and behaviours (Alexander, 2019).

Trauma-informed teaching – Through a deep understanding of impact of trauma and using a trauma-sensitive lens, caring educators empower and support student learning in an inclusive environment. (Wolpow et al., 2009: Trauma and Learning Policy Initiative: Creating and advocating for trauma sensitive schools (2013a)).

Trauma-sensitive school – A concerted effort from all school personnel to ensure all students feel safe and supported in a welcoming environment that understands the impact of trauma on learning and holistically addresses students' needs (Jones et al., 2018; Trauma and Learning Policy Initiative: Creating and advocating for trauma sensitive schools (2013).

Chapter 1 – Introduction

Introduction

In Canada, many children and youth are exposed to various traumatic incidents or find themselves in circumstances that could cause trauma. These adverse childhood experiences (ACEs) are traumatic events that can be caused by physical, sexual, or emotional abuse or neglect (Kennedy, 2021). According to Petruccelli et al. (2019, p.1) "Adverse Childhood Experiences (ACEs) are psychosocial factors with significant negative impact on health". ACE experiences include physical, emotional and sexual abuse; physical and emotional neglect and household dysfunction, including substance abuse, mental illness, domestic violence, incarceration and parental separation (Petruccelli et al., 2019). Statistics Canada (2017) reported that one-third of children aged 15 have self-reported some form of maltreatment during their childhood in the form of abuse or neglect. While this number is significant, the Public Health Agency of Canada (2018) claimed that family violence was often underreported due to the stigma associated with it. It is also important to note that Canadian law requires children/youth between the ages of 6 and 17 to attend school. Consequently, today's classrooms may have children/youth who have or are currently experiencing trauma that teachers need to be prepared to support (Justice for Children and Youth, 2021).

This research study has three objectives. First, it provides information that illustrates the prevalence of trauma children and youth face. The literature illustrates how trauma impacts students' ability to learn and to regulate in classroom settings. Second, it shows how teachers are under-supported in recognizing trauma and are not equipped to adequately support students who experience trauma. Finally, the research demonstrates the need for teachers to be provided professional development related to supporting students who experience trauma.

Understanding the Landscape of Childhood/Youth Trauma

Trauma can be defined as experiences that are not in the range of normal human experiences (Alexander, 2019). These adverse childhood experiences (ACE) "could include, but are not limited to war, acts of terrorism, life-threatening disasters, severe accidents, domestic violence or child abuse (Alexander, 2019, p.5). Given that many students who attend school may experience maltreatment or trauma in their personal environments, it is imperative that educators should receive professional development that would assist them to meet the needs of their students. Recognizing trauma and understanding the effects that trauma can have on the child/youth is critical to providing an appropriate learning environment. Anderson et al. (2015) discusses the importance of professional development opportunities for educators that focus on building trauma-informed school communities; however, they also address the concern that not enough attention is given to teachers to support this. It is through professional development experiences that educators can be better supported within their practice.

According to Social Development Canada (2019), 3.4 million Canadians or 9.5% live in poverty, with 622,000 being children/youth under the age of 18. This equates to approximately 9.0% of Canadian children/youth living in poverty. Poverty does not necessarily equate to maltreatment; however, children/youth who are neglected and hungry may have their learning impacted and may experience trauma (Wade et al., 2014). Also, according to Wade et al. (2014), there is a disproportionate link to adverse childhood experiences (ACE) and children/youth who live in poverty. Wade and her colleagues (2014) suggest in their study that many of these children/youth experienced trauma, victimization, abuse, poor health, and discrimination. These negative stressors may have a direct impact on a child's/youth's ability to function in the classroom.

Statistics Canada (2017) states that one in ten children/youth were victims of sexual abuse. Females are three times more likely to report that they have been sexually victimized before they turned 15 years old. This represents the 10% of children/youth who report the abuse. Traumatic victimization impacts students and their ability to learn in school; therefore, "students with traumatic histories often struggle with meeting the academic demands of the classroom due to socioeconomic stressors and triggers that persistently hinder these executive functions" (Crosby et al., 2018, p. 19). Yet, most teachers may not understand how these forms of trauma may affect brain development and classroom behaviours which impact children/youth at school. Teachers are largely unaware of the impact trauma has had on the developing brain (Bixler-Funk, 2019).

According to Statistics Canada (2017), 59,236 children/youth across Canada report being subjected to violence or maltreatment. These children/youth have not only experienced victimization, but each day they attend school where they are expected to sit down, do their schoolwork, learn, retain information, and fit into a system that is not designed for traumatized students. "The ability to read, write, solve math problems, and engage in discussions requires attention, organization, comprehension, memory, the ability to produce work, engage in learning and trust" (The National Child Traumatic Stress Network, 2017, p. 2). These required educational tasks become impossible for the traumatized student to accomplish. It is only by understanding the effects trauma has on children and young adults that teachers can be equipped to better understand their behaviours, what children/youth need to learn, and how one caring adult may change the trajectory of a child's/youth's life. Carter and Blanch (2019) state "growing evidence suggests that trauma-informed organizations – those that have policies,

practices, and environments reflecting the science of trauma and resilience – can reduce long-term consequences for individuals and society" (p. 50-51).

In an interview with Dr. Morton Beiser, a psychiatric epidemiologist from Toronto, Beiser points out that refugees new to Canada exhibit a multitude of behaviours associated with trauma. These children/youth have witnessed exposure to war, death, been in refugee camps and have lived through deprivation (Clibbon 2015). The National Child Traumatic Stress Network (2017) cautions that children/youth from various backgrounds might be affected by trauma as well. They suggest that children/youth who grow up in poverty or are homeless are susceptible to experiencing trauma. The National Child Traumatic Stress Network (2017) concludes that children/youth with intellectual delays have an increased risk of abuse, seclusion, and sexual and emotional abuse. As well, they indicate that lesbian, gay, bisexual, transgender, intersex, queer, or questioning (LGBTIQ) children/youth may also show signs of trauma due to harassment, physical and sexual abuses, and rejection. It was also suggested that children/youth often did not know who to report to and were wary as to who they could trust to report incidences of violence or maltreatment (Public Health Agency of Canada, 2018). With such distressing statistics, it is not only imperative for educators to be aware of these disturbing figures, but to be prepared to teach children/youth in a way that best suits their needs without inadvertently further traumatizing them. Students who have experienced trauma "may experience a range of reactions including behavioral changes, emotional distress, grief, difficulties with attention, academic failure, nightmares, or illness" (National Child Traumatic Stress Network, 2017, p. 2). It is essential for educators to understand the impact trauma has on students, their learning, and their behaviours; thus, making it imperative that trauma-informed environments are created.

Without understanding the effects of trauma and learning how to create trauma-informed schools and classrooms, teachers are under-equipped to provide an environment that meets their students' needs. By providing professional development opportunities that are targeted at educating teachers about the prevalence of trauma students experience, actively engaging them to understand the effects of trauma on students and providing them with tools to assist their students who experience trauma, teachers will be better prepared to address situations in their own classes.

Children and Youth in Schools

The National Child Traumatic Stress Network (2017) states that children/youth who experience trauma may have difficulty regulating their behaviour, may struggle with learning and may find it challenging to cope with everyday life. When children/youth consistently struggle in school and have trouble learning and retaining information, a typical course of action is to test for learning difficulties; thus, signalling the educators to create individual educational learning plans for their students. Walkley and Cox (2013) cautions that students are often mislabeled and are given a diagnosis of attention deficit syndrome or oppositional-defiant disorder which could prevent them from receiving the help that they require. Spiro (2019) ascertains that symptoms such as difficulty concentrating or having an exaggerated startle response could have been misdiagnosed to be attention deficit disorder, rather than be acknowledged and understood as the results of post-traumatic stress.

While students who are diagnosed with some learning disorders may be put on Individual Education Plans (IEPs), other students, who also may experience having their learning impacted because of trauma, may also be placed on the IEP because trauma could be impacting their ability to learn. Sacks and Haider (2017) describe the IEP as:

a legal document that outlines the students' "appropriate" education, indicates how the

student's disability impacts participation in the general education courses, details the

services that the student will receive…states measurable academic and functional goals,

outlines necessary accommodations and modifications, and establishes the least

restrictive environment in which the student will be placed (p. 961).

There are considerations educators must take before creating IEPs for students. Formal

performance assessments and reviews of a student's work and of their academic performance are

required. The formal assessment needs to be completed by a qualified practitioner who reviews

documentation which is provided to the practitioner by the teacher. Then, in consultation with

parents, students are then placed on the alternative program (Publications Saskatchewan, 2018).

However, there is one consideration that may not be present when determining if a student

should be placed on an IEP, and that is the consideration that the student's learning or behaviour

may be impacted by trauma. This step is often missed from the process and is needed prior to

formalizing the IEP.

The IEP needs to involve the parents/guardians and teachers of the student. Mitchel et al.

(2010) ascertains that families often feel isolated and marginalized in the IEP meetings that are

required for a child/youth to be placed on an IEP. This is yet another means of adding stress to

the child/youth and the family. Therefore, placing a child or youth, who is experiencing trauma,

on an IEP should be done with a trauma lens. As the research points out, the brain will not

function properly when it has experienced trauma (Alexander, 2019; Craig, 2008; Craig &

Sporleder, 2017). If children or youth in trauma are experiencing what appears to be learning

disabilities due to the brain not being able to function properly at that time, their academic

performance may indicate a disability and create the perception that the student needs academic

accommodations. However, by providing trauma-informed professional development, educators may be better situated to create educational plans for their students that are trauma-sensitive.

Given the prevalence of trauma in today's children/youth and its documented impact on learning, it is imperative to increase the awareness of teachers so that the appropriate adjustments can be made to their teaching strategies and their practice. To facilitate this, it is essential that teachers are provided professional development that enables them to support students experiencing trauma. Teachers are crucial to students' success at school as Jennings (2019) states:

> Evidence shows that when a child has a supportive and caring relationship with
>
> [their] teachers and peers, and feels a strong connection to his school, [they build] the
>
> resilience [they need] to cope with [their] hardships and focus on [their] schoolwork (p.3).

In order to better support children/youth who are experiencing the effects of trauma, it is imperative to provide trauma-informed professional development for teachers.

The Importance of School Principals/Administrators

Principals in schools often have students in their office to discuss behavioural issues. Students who are angry, verbally abusive or have experienced physical aggression are frequently sent to the principal to correct behaviour and rectify the issues. Disciplinary actions such as phone calls home and suspensions both in school and out of school may be the norm for addressing these behaviours. These consequences do not demonstrate an understanding of the behaviours as trauma responses (fight, flight, freeze) and do little to address the underlying issues associated with trauma in children/youth which may intensify the responses. Sadin (2020) points out that leaders not only need to be trauma-informed, but they also need to equip themselves with the necessary tools to create trauma-informed environments for their students.

To achieve a trauma-informed environment, it is imperative that all staff in the school are led by

an administrator who understands trauma, its effects and knows how to foster a trauma-informed

approach. "The principal is needed to make sure all the actions related to trauma sensitivity are

woven throughout the school and aligned with other ongoing initiatives, such as bullying

prevention, positive behavioural health, social-emotional learning and others" (Trauma and

Learning Policy Initiative, 2013a. p.39).

Further Support for Trauma-Informed Teaching

While the need for a trauma-informed approach to teaching seems obvious, what should

also be compelling is a class action lawsuit that was filed against Compton Unified School

District in California in 2015. The article states: "the litigation alleges that the district has failed

to address the underlying obstacles these students face and has inadequately trained teachers and

others to provide these students an appropriate education" (Ceasar, 2015, para. 4). Ceasar (2015)

claims that the lawsuit contends that students who had been the victims of violence, had

witnessed murders and were in foster care, were not given adequate support at school for their

trauma and that the school officials resorted to punitive measures for these students exposed to

traumatic events thus reinforcing the trauma. The class action suit maintains that had staff been

adequately trained in trauma, students in the district would have had their educational needs met.

While the lawsuit has yet to be resolved, staff are being trained in this district and the need to

raise awareness of trauma-sensitive practices continues (Sparks, 2020).

Purpose of the Study

As reported by Conroy et al. (2019) Saskatchewan ranks highest of the provinces of

police-reported-family violence against children/youth and is second amongst the provinces for

non-family-related violence. Therefore, the purpose of this study was to investigate what a

specific group of teachers in Saskatchewan know about trauma, explore their understanding of what trauma does to their students, and to help to show how a trauma-informed teaching practice can support students. As trauma can affect students' learning and their behaviours, this study looked at how professional development can assist teachers to be better equipped to support their students.

Research Questions

Professional development is pivotal to improving teacher practice (Hilton and Hilton, 2017). Teachers need to be informed about their students, their practice and learn how to make adjustments that will improve student learning and outcomes. By providing online and interactive professional development, this study aimed to identify how professional development, in trauma-informed teaching, can enable educators to adjust their teaching strategies to better support students in the classroom. This was achieved by answering the following research questions: 1. What do teachers understand about the effects of trauma on student learning? 2. What trauma-informed professional development supports are needed to support educators? 3. How could online, blended and distance education play a role helping teachers support students with trauma?

Significance of the Study

Reports from the Public Health Agency of Canada (2018) confirm that children/youth have been victims of violence or maltreatment. As children/youth spend the bulk of their day at school it is imperative for educators to create trauma-informed environments that are conducive for learning. The results of this study will contribute to school divisions' understanding of the importance of professional development related to trauma-informed practices as a means to

provide safe and effective learning environments. Siegal (2019) explains the importance of ensuring teachers understand how trauma can present in children/youth:

> If a teacher is uninformed about these inner processes of trauma, the outer actions of a child may be baffling, irritating, and, as a consequence, could lead to frustrated communications with a student that reinforced the child's experience of being misunderstood, or worse, disrespected and disregarded (p. xv).

As teachers work directly with students in the classroom, they need to not only understand the impact of trauma, but also learn to teach in a sensitive manner that allows students to feel supported in their learning and in their environment. Hilton & Hilton (2017) conclude that teachers change through active professional development and that practitioner research has the capacity to support teachers through active learning.

Research Plan

This study intended to discover teachers' understanding of trauma, and its effects on student learning and behaviour to illustrate how, through professional development, changes to teaching strategies could be made to better serve children/youth who were experiencing trauma. By interviewing teachers and through online forums, the research aimed to clarify possible gaps in professional development. Through the active engagement of teachers in the process, information was provided to ensure teachers were equipped with knowledge that would help them to understand trauma and its effects on student learning. It also examined their own need for further professional development in trauma-informed learning to adequately create trauma-informed learning environments.

The first step in achieving this objective was to survey the teacher- participants from Saskatchewan to develop an understanding of their baseline knowledge regarding the effects of

trauma and for them to reflect and evaluate their current teaching situation to consider if

classroom behaviours and learning issues may be associated with trauma. The 2017 Statistics

Canada report clearly showed that Saskatchewan ranked amongst the highest of the provinces for

abuses towards children/youth. For this reason, only teacher-participants from Saskatchewan

were invited through social media to participate. Originally, 15 teacher-participants responded to

the open Twitter call to Saskatchewan teachers, and all were invited to participate; however, due

to personal circumstances, two participants had to withdraw prior to completing the survey.

After an initial questionnaire, which attempted to get an understanding of their baseline

knowledge of trauma, their past teaching experiences and professional development

opportunities, each participant was given information, through an online forum, that highlighted

the effects of trauma on the brain, its effect on behaviour and on learning. Teacher-participants

were also provided with the information from Statistics Canada that showed how many students

are affected by trauma in Canada and in Saskatchewan, to help them understand the significance

of this study, and how it could affect the situations in their classrooms. The online forum also

provided pre-selected resources that the participants might find to be useful to help create a

trauma-informed classroom.   Finally, participants were asked to participate in an interview

process. This interview illustrated what means of professional development support were still

needed for teachers. It also analyzed whether teachers' perceptions about student learning and

student behaviours had changed. Lastly, the interview inquired whether the information attained

in the short Moodle professional development course would change teachers' practice moving

forward.

Inclusion/Exclusion Criteria

The inclusion criteria for this study were to find teacher-participants from both rural and urban teaching areas in Saskatchewan. As the Statistics Canada (2019) research indicates, violence against children/youth is nearly twice as high as in urban areas. It was also important to have teachers with varying years of experience and with various teaching assignments to be part of the inclusion criteria for this research. Participants would only be excluded if numbers reached more than 20 participants or if there were a disproportionate number of participants in one geographical area (rural/urban), or if there were primarily high school or elementary teachers. As only 15 participants volunteered, all were included in the study as it was determined that there was a sufficient balance between rural and urban communities, as well as diversity in the participants' teaching assignments.

Methods Overview

A practitioner action research methodology was chosen for this study. "Practitioner research possesses elements of both practice intervention and inquiry" (Shaw & Lunt, 2018, p. 142). The research provided data that illustrated the gaps in professional development for educators in the area of trauma-informed teaching and learning. Shaw and Lunt (2018) claim that through practitioner research, the professional can focus on their own practice and implement effective change. With practitioner action research, there is the potential to empower participants and impact change (Henthorn et al., 2022). It is through change and one's focus on their practice that teachers can make the most impact in their classrooms.

This study used a qualitative approach to answer the research questions. "In qualitative research, the aim is not to measure the reality but to interpret it" (Heikkinen et al., 2016, p. 4). By creating a dialogue with participants, a deeper understanding of what educators know about

trauma and its effects on students was established. This understanding provided the researcher with an awareness of the professional development gaps that exist in trauma-informed teaching and learning for Saskatchewan educators. The qualitative approach encouraged the researcher to think reflectively while also building researcher-participant relationships (Pieridou et al., 2020).

The research was divided into three stages. The first stage of the process was an online questionnaire (Appendix 1) that identified the participants' understanding of trauma as well as acquiring participant demographics. To create a baseline of understanding, an online questionnaire was provided to participants (Appendix 1) in order to understand what experiences the teacher-participants have had in the classroom and the degree of professional development they have acquired in the area of trauma-informed teaching. The research also examined what professional development opportunities have been allotted to them over their years of teaching. The research focussed on teachers in Saskatchewan because of the disproportionate reports of maltreatment towards children/youth in this province. It also achieved an understanding of what the teachers who participated in the study knew about trauma and its effect on their students prior to beginning this study's professional development exercises.

The second stage of the research plan provided teachers access to online professional development (Appendix 2) and resources that would assist them in their understanding of the effects of trauma, and how it may affect student achievement. The research concluded with an interview (Appendix 3) with participants.

Finally, the research proposes recommendations that originate from the participant feedback. Hilton and Hilton (2017) claim that professional growth and change occur when active reflection happens. Through the online professional development, direction to other professional development opportunities and resources was provided. Teachers were offered links to further

training and online resources which could assist them in their classrooms and with their students

who are experiencing trauma.

Theoretical Framework

The theoretical positioning of this research lies within social constructivism. A central

tenet of constructivism is that learning is constructed through social interaction and dialogue

(Palincsar, 1998; Vygotsky, 1978). "Social constructivism asserts that learning is an inherently

social process involving much more than merely the acquisition and assimilation of facts" (Barak

& Green, 2021, p.8). As teaching is a highly social profession, using social constructivism as a

framework for this study was essential. Barak and Green (2021) further assert that this is an

established educational theory that is collaborative and promotes practical knowledge.

Collaboration, the acquisition of practical knowledge and the premise of learning together are

integral to this study. In fact, Palincsar (1998) expresses that social constructivism is also

important to professional development contexts in which teachers are encouraged to test new

methods and to share knowledge and understanding with their peers. The participants in this

study were invited to interact with one another through the learning process and were invited to

take any new information about trauma-informed teaching and learning and apply it to their own

classroom situations.

Limitations and Delimitations

All research has limitations defined as "potential weaknesses that are usually out of the

researcher's control" (Theofanidis & Fountouki, 2018, p.156). Possible limitations in this study

could include the time constraints teacher-participants were facing in their own practice, time

restraints of the researcher, teacher-participants may also have had difficulty letting go of their

own biases and understandings of student behaviour and learning to allow a deeper discussion

regarding past occurrences with students. Self-reflection could also be difficult for some people and this study required teacher-participants to embrace past mistakes and misconceptions and find ways to reflect on their practice to ensure that they were moving towards a better understanding of trauma-informed teaching.

A limitation of the study relates to the characteristics of the teacher-participants. None of the participants were uninformed about or inexperienced with trauma-informed teaching and learning. Each participant maintained a strong commitment to professional development and were interested in learning about or further understanding the topic of trauma-informed teaching and learning. Some of the participants worked in schools that have a high volume of students who are experiencing trauma. The limitation experienced was not having teachers who had little to no understanding of the impact trauma plays on student learning and behaviours.

Delimitations are "limitations consciously set by the author themselves" (Theofanidis & Fountouki, 2018, p. 157). This study was only focusing on teachers in Saskatchewan which limits the field of respondents. The number of participants chosen to participate was a maximum of twenty teachers to ensure manageability of the research itself. Another delimitation was the use of Twitter to recruit participants. Not all teachers in Saskatchewan use Twitter; therefore, limiting eligible participants.

Chapter Summary

According to Hensley (2019), Canada is ranked as the third best country in the world in which to reside. However, "Canada's global reputation as a healthy place to raise children is belied by statistics showing strikingly high rates of suicide, child abuse and struggles with mental health" (The Canadian Press, 2018, para 1). "Childhood maltreatment is one of the most serious and costly problems faced by modern society" (Leeson & Nixon, 2010, p. 30). Given the

fact that this kind of treatment leads to trauma, which could affect children/youth's ability to learn and to regulate in a classroom environment, it is important that teachers understand the effects of trauma and learn how to create trauma-informed environments. Carello and Butler (2015) state that being trauma-informed encompasses an understanding of how victimization, violence and traumatic events could impact lives. As the research illustrates, teachers are encountering students who have been affected by events in their lives that could cause trauma. Without adequate professional development and support, teachers are not able to properly address issues (Anderson, et al., 2015). While this study aimed to understand teachers' awareness of the effects of trauma on students, its focus, through a practitioner action research approach, determined what means of professional development support were still needed for educators to help students experiencing trauma and examines at how online, blended and distance learning may help to facilitate this learning.

Chapter 2: Literature Review

Introduction

In chapter 1, the concept of trauma was introduced and its potential effects on children/youth's learning to highlight the importance of teacher professional development to support them. In this chapter, a review of the literature explores the prevalence of trauma in children/youth in Canada and in Saskatchewan specifically and examine the effects it has on student learning and behaviour. It examines the need for teacher awareness in the area of trauma-informed learning and how the impact of trauma-informed schools and classrooms can influence student success. Finally, it concludes by discussing the importance of professional development in the area of trauma-informed teaching and looks at how teacher development can impact positive change for students.

Prevalence of Trauma in Canada

"According to self-reported data from the 2014 General Social Survey (GSS) on Victimization (GSS), one-third (33%) of Canadians aged 15 and older experienced some form of maltreatment during childhood" (Statistics Canada, 2017. p. 1). This data is similar to the Family Violence in Canada: A statistical profile, 2017 report, which also showed that police reported 33% of children/youth were victims of violence (Burczycka et al., 2018). Although young children, adolescents and young adults experienced varying degrees of trauma, it remains alarming that children/youth are enduring violence and abuse, which includes physical violence, sexual abuse, or bearing witness of abuse by a parent or a guardian. The GSS report indicates the most prevalent form of abuse is physical in nature at 25%; however, 8% of children/youth are subjected to sexual abuse and 5% reported both physical and sexual abuse during childhood. In addition, 66% of the victims reported that they were abused between 1 and 6 times. The report

also states that 93% of the abused did not seek police or child protection services before they

reached 15 years of age and approximately two-thirds of the victims did not speak to anyone at

all during those times of abuse. The GSS also shows that childhood sexual abuse for boys is

more often perpetrated by someone other than a relative whereas 54% of females indicated that

their sexual abuser is a relative.

The following information from Statistics Canada (2017) also reports in the GSS,

physical abuse was 60% more likely to be at the hands of a parent or immediate family member.

It also indicates that for Indigenous children/youth, the statistics are greater with 40% of those

reporting indicated that they experienced either physical or sexual abuse. The GSS also provides

an account of police reported victimization of children/youth. According to their data, 16% of the

victims of violent crimes in Canada were perpetrated on children/youth. Of these, 30% were

committed by parents, siblings, and extended family. Physical assault was the most reported

abuse against Indigenous children. The data from the 2017 report also indicates that the police

re-counted 322,600 cases of reported violent crimes and two-thirds of these victims were female.

In Conroy et al. (2019) Statistics Canada profile, Saskatchewan reported the highest

amongst the provinces in Canada for violence against children/youth with 453 incidents per

100,000 of family related violence reports. This report also shows that violence against children

is nearly twice as high in rural areas as opposed to urban areas. The report also indicates that

Saskatchewan leads the provinces in reports of intimate partner violence at 655 per 100,000. It is

important to note that witnessing acts of violence can also contribute to childhood/youth trauma.

While the Government of Canada does share national statistics for the provinces and

territories regarding incidences of violence and maltreatment, The Saskatchewan Alliance for

Youth and Community Well-being (SAYCW) has developed a survey that includes the voices of

the students of Saskatchewan. The *2019 SAYCW Thriving Youth, Thriving Communities*

surveyed 10,574 students from grades 7-12 from 162 schools and 19 school divisions. The

results show that 22% of youth reported that they experienced food insecurities and 38% of those

surveyed were worried about not having enough food. Another area that the survey addresses is

bullying in which 59.8% of the students disclosed that they were bullied. A third area of this

survey reports dating control and violence. Of the participants who reported being actively

dating, "41.6 percent experienced controlling and/or violent behaviours" (Saskatchewan Alliance

for Youth & Community Well-Being, 2020. p.31). There were 28.9% of the sexually active

respondents who reported unwanted sexual activity. The survey also explored aspects of

students' mental health. When asked about self-harm, 21.6% of respondents shared that they had

deliberately harmed themselves.

      According to the Children First Canada report (2016) one in five children/youth have

considered suicide and one child/youth dies every nine hours from a preventable injury. The

2019 SAYCW Thriving Youth, Thriving Communities report asked students if they ever

considered attempting suicide. The survey results show that 1063 Saskatchewan students

considered suicide, 323 considered it and planned it, 263 considered, and attempted suicide and

finally 714 considered, planned, and attempted it.

      Children and youth in Canada and in Saskatchewan are affected by traumatic events and

these events can have an impact on students' learning and their behaviours. While teachers need

to understand that trauma is prevalent in their schools and their classrooms, they also need to

have a thorough understanding of how trauma effects the brain.

Effects of Trauma on the Brain

It is important for educators to understand how trauma affects the brain's ability to learn. The human brain is seen as divided into three main parts: the hippocampus, the amygdala and hypothalamus, and the cortex. Each part of the brain develops at different stages and is responsible for different functions. The brain is responsible to keep us alive, to regulate our breathing and control our thinking and emotions. Although each area develops at different rates, each could adversely be affected by trauma (Alexander, 2019).

Alexander (2019) explains that the hippocampus is integral for memory. This includes facts, events, and memories. "Even if a traumatized child is too young to remember adverse experiences, the person will likely still remember what happened implicitly in terms of body sensations or emotions" (Alexander, 2019, p. 12), which suggests that this was why during certain situations a child/youth may have felt threatened or upset. In van der Kolk's (1994) study, he explains that memories can become engraved in the brain and can surface at various times. He also explains that they can emerge as nightmares or flashbacks and can activate the fight, flight, freeze response (van der Kolk, 1994). "Repeated childhood exposure to traumatic events can affect the developing brain and nervous system, such that the brain is more easily triggered into survival mode even when there is no actual danger present" (National Child Traumatic Stress Network, 2017, p. 3). Whitlock et al. (2006) explains that the hippocampus is essential to learning and memory formation. When a person experiences trauma, "the memories may be processed abnormally, leading to overrepresentation, such as intrusive thoughts and nightmares, or suppression, inability to recall memories or selective amnesia" (Carrion & Wong, 2012, p. S24). The effects of trauma may have adverse impact on the student who is trying to learn in the classroom, thus making it vital for the teacher to understand the impact of trauma. "Trauma acts

as a threat to an individual's well-being, thereby activating a neurobiological stress response"
(Carrion & Wong, 2012, p. S23).

      The areas of brain that can also be affected by traumatic experiences are the amygdala
and the medial prefrontal cortex (mPFC). Alexander (2019) explains that this part of the brain is
responsible for sending messages. It works with the hippocampus to help recognize danger or
threats. This is the part of the brain that helps to keep us safe. Alexander explains that when the
amygdala is activated, the brain virtually saves time by allowing for quick reactions. McInerney
and McKlindon (2014) explain that "Traumatic experiences can actually change the structure and
functioning of a child's brain through the activation of stress response systems" (p. 4). Traumatic
experiences in children/youth may create adverse and inappropriate reactions to situations
because the brain is telling them to fight, flight or freeze. Park et al. (2018) describe how adverse
trauma can have significant effects on this area of the brain such as impaired functioning, anxiety
disorders and disruptive behaviours. Park et al. (2018) also suggest that the trauma experienced
could have lasting impact into adulthood and may be linked to substance abuse and mental health
symptoms. This research was originally done by Felitti et al. (1998). Their research study that
examines the relationship between childhood abuse and adult health risks and adverse
behaviours. Park et al. (2018) asserts that "the relation between stressful life events and
amygdala mPFC functional connectivity is present early in development and that this
connectivity is associated with poorer mental health" (p. 434).

      The cortex is the upper area of the brain and serves many functions. It manages emotions,
helps us make sound decisions, helps us to show empathy and morality. It develops through
interaction with a child/youth's caregivers (Alexander, 2019). "If this development is negatively
affected by trauma, any of these processes may be negatively affected too, resulting in youth

who may have diminished capacity for coordinating their thinking, regulating their arousal and emotions, and modulating behavior" (Alexander, 2019, p. 13). This explains why children/youth with trauma may exhibit lack of empathy or remorse. The prefrontal cortex is the part of the brain that allows us to think, solve problems and learn. It "is responsible for the executive functions, which include mediating conflicting thoughts, making choices between right and wrong or good and bad, predicting future events and governing social control, such as suppressing emotional or sexual urges" (Creeden, 2009, p. 262). It helps manage emotions and behaviors. McInerney & McKlindon, (2014) explains that children/youth can experience physiological changes to the brain which has the potential to obstruct academic success thus having an effect on the students' ability to learn.

Fight, Flight, Freeze, Appease/Fawn– Reactions to Trauma

The brain and body can respond to trauma in many ways. As noted earlier, a child/youth may react to situations with various involuntary trauma responses: fight, flight, freeze or appease. Mahaney (2022) describes the fight response is one that establishes boundaries and allows the child/youth to move toward the conflict with anger or aggression. Eller and Hierck (2021) claim that this response gives children/youth the sense that through the fight response, they can remove the threat, whether real or perceived.

The flight response can occur when children/youth feel the need to get away from the situation. Eller and Hierck (2021) explain that this response can happen as result of ongoing trauma and can occur if the "child feels he or she is weaker or subordinate to the person responsible for the traumatic situation" (pg. 26). Alexander (2019) claims that children/youth whose flight response is easily activated may appear to be defiant but are using the flight response as a means of self-protection.

When a child/youth's freeze response is activated, they can become withdrawn and may find speaking and moving difficult (Mahaney, 2022). Mahaney (2022) also describes this state of response where students may be at a loss for words, may withdraw or even detach themselves. She also states that this response is "the same as temporary paralysis" (Mahaney, 2022, para. 13) as a means of avoiding the additional stress.

The appease or fawn response for the child/youth is about "pleasing others and engaging in pacifying behaviours" (Mahaney, 2022, para.15) in order to neutralize a threat or prevent one from surfacing. Eller and Hierrch (2021) explain that when children/youth are trying to appease, they are doing so to make the situation go away. However, the authors also warn that this behaviour can, over time, create situations where the child/youth can become victimized because they are allowing others to dominate them.

The brain has many functions and responsibilities. When the brain is exposed to trauma during its development, one or more of the areas of the brain can be affected. If educators have a clear understanding of how trauma affects the parts of a brain, they will have a better understanding to why students who experienced trauma may have difficulty learning and achieving in a school setting.

Type of Traumas and How They Impact the Brain

Students can experience a variety of types of trauma. The Trauma-Informed Care Resources Guide (2017) from The Crisis Prevention Institute (CPI) has made three classifications of trauma. The first type, Acute Trauma, or Type I trauma is when a child/youth experienced trauma from a single yet overwhelming event. This can range from a natural disaster, a death of a loved one or rape. The CPI states that Acute Trauma may result in

children/youth experiencing detailed memories of the event, exaggerated startle response and overreactions to situations.

The second type of trauma illustrated by the CPI is Complex Trauma or Type II trauma. This trauma results from extended exposure to a traumatic situation such as prolonged abuse or bullying, neglect or incidents where the child/youth is removed from the home on numerous occasions. This trauma can result in dissociation, rage, social withdrawal, and feelings of denial. Students who experience this form of trauma are often operating in the survival mode (Trauma Informed Care Resource Guide, 2017). Unfortunately for students academically, this affects the higher brain functions as these functions are temporarily put on hold (Wolpow et al., 2009). Terr (1991) claims that this stress may cause children/youth to be in such a state of denial that they appear exceptionally withdrawn.

The third type of trauma described by CPI is Crossover Trauma or Type III trauma. This is a single traumatic event such as a school shooting, car accident or a natural disaster in which fatalities may be involved. Children/youth in this state may experience perpetual pain, have trouble concentrating and may have difficulty sleeping. They may be irritable and depressed (Trauma Informed Care Resource Guide, 2017).

Whether children/youth experience Acute Trauma, Complex Trauma or Crossover Trauma, the effects of the trauma can affect the brain during its developmental stages. Not only is it important for educators to understand the types of traumas and how each affects the brain, but they also need to know what this meant for the child/youth's cognitive development. If the brain's cognitive function is impaired by trauma, then a child/youth's higher-order thinking could be compromised.

How Trauma Can Impair Cognitive Functioning

"Early trauma limits adolescents' ability to use higher-order thinking to regulate subcortical brain activity. Their thinking is 'held hostage' by relentless fear and hyperarousal that derail focus needed to achieve academically" (Craig & Sporleder, 2017. p. 7). If students are impaired by their trauma, they might seem to have either a learning disability or a cognitive delay. Craig (2008) explains that students exposed to violence have a distorted reality which can make their learning more difficult. She also explains that they may not have a clear understanding of cause and effect, may not be able to control their own behaviours, and may not be able to accurately problem solve. These limits can impair their success at school. McInerney and McKlindon (2014) explain that "it is well documented that a child's reaction to trauma can 'commonly' interfere with brain development, learning, and behaviour -- all of which have a potential impact on a child's academic success as well as the overall school environment" (p. 1). When a child or adolescent experiences these events, the thinking part of their brain is affected (Alexander, 2019).

Trauma can create significant challenges and impediments to students' learning because the cortex part of the brain is affected. While the cortex is responsible for learning, student academic success may be affected. Although learning can be affected because of students' trauma, there is also significant research to show that trauma plays a role in adverse student behaviour as well.

How Trauma Can Surface as Behavioural Problems

Cognitive delays are not the only issues children/youth with trauma could face; they may also find themselves experiencing difficulty regulating in the classroom and managing their behaviour. Simsek and Evrensel (2018) research show that that there is a relationship between

trauma and aggressive behaviours. Children/youth who experienced trauma may exhibit a

multitude of problems in school including discipline referrals and even suspensions (Wolpow et

al., 2009). It is important to remember that the amygdala and hypothalamus which are

responsible for the fight, flight, freeze process in the brain may be compromised due to the

significant trauma the child/youth has experienced. As Cook et al. (2005) explains, "children

with complex trauma histories evidence both behavioral and emotional expressions of pathology

due to impaired capacity to self-regulate and self-soothe" (p. 393). When faced with adverse

issues in school, they may have difficulty regulating their behaviour. Cook et al. (2005) adds

"chronic trauma exposure may lead to an increasing overreliance on dissociation as a coping

mechanism that, in turn, can exacerbate difficulties with behavioral management, affect

regulation, and self-concept" (p. 394), thus not being able to adhere to classroom norms and

expectations. Instead, they may act out. Wolpow et al. (2009) indicate that children/youth may

respond to trauma in various ways including "… aggression, defiance, withdrawal,

perfectionism, hyperactivity, reactivity, impulsiveness, and/or rapid and unexpected mood

swings" (p. 13).

"Traumatized children tend to communicate what has happened to them not in words but

by responding to the world as a dangerous place and by activating neurobiological systems

geared for survival, even when they objectively are safe" (van der Kolk, 2003, p. 309). Often

educators are not aware of the symptoms of trauma and mistake them for behavioural problems

in the classroom. This confusion can have an increasingly negative impact for students as it

created labels or stigmas for children/youth. Paiva (2019) states that many traumatized students

will struggle to self-regulate, will show aggression, and may find themselves in fights with peers.

Without proper understanding of the effects of trauma, educators may see this as simply bad

behaviour. This can result in consequences for the child/youth such as isolation from their peers, in-school suspension, or not being allowed to return to class until behaviour has changed. Because it is difficult for them to regulate, this expected behavioural task can be difficult and may result in suspensions.

Craig and Sporleder (2017) and Paiva (2019) show a relationship between the acute trauma students endure and its correlation to student delinquency. They state that if trauma persists, students may experience a heightened state of alarm which may leave them with minimal ability to self-regulate and cope with the demands of school. Craig and Sporleder (2017) also explains that child/youth victimization is an assault on the development of the child. When this occurs, children/youth "distance themselves from conscious awareness of distress in a manner that increases their likelihood of acting out in maladaptive ways" (Craig & Sporleder, 2017, p. 49). When children/youth alienate themselves from school and their peers, they do not learn how to self-regulate and to build relationships, nor do they acquire all the necessary skills to succeed academically.

Trauma has adverse effects on children/youth. For a child/youth who has behavioural problems in the classroom, this can lead to problems developing relationships with peers. As traumatized students may have difficulties controlling their behaviours, they may be confrontational or may have trouble self-regulating. It is important to note that these behaviours can alienate students, can impact relationships and can affect their social and emotional well-being.

How Trauma Can Impact Social-Emotional Behaviours

Children/youth who experience significant trauma may also be impacted socially and emotionally. If a child/youth's hippocampus has been affected, they may not be able to properly

build relationships with others. "As a result, these children have trouble with social activities, such as cooperative play and social conversation. They also have trouble making inferences to explain or predict other people's behavior" (Craig, 2008, p. 20). In a school setting, students are expected to play with others, listen to others' opinions and work collaboratively; however, as Paiva (2019) mentioned, traumatized students "may struggle to see the world, and hence the school, as a safe and trusting place" (p. 24). This further alienates the students from their peers.

As Siegel (1999) clarifies, it is critical for children/youth to have a strong emotional and physical attachment to their caregiver as it is integral in their brain development. Children/youth need protective and supportive environments. Alexander (2019) explains that neglect, severe parental mental illness, and domestic violence experiences over extended periods of time can create prolonged adversity for the child. The absence of the supportive environment for a child/youth may obstruct the ability to maintain supportive relationships. Craig, (2008) states that "forming relationships with teachers is a dilemma for children whose histories include traumatizing experiences with caregivers" (p. 87). Trust can become a concern for the child/youth, and as a result deter them from seeking help from their teacher. "Fear of being seen as incapable makes it difficult for them to ask for help or to seek reassurance from teachers. Some withdraw, whereas others develop patterns of noncompliance or not completing work as 'face-saving' techniques to hide their vulnerability" (Craig, 2008, p. 22). Not only is the child/youth's safety compromised, but they are forced to deal with the traumatic events that may affect their cognitive development, their ability to trust and reason, and their social and mental well-being. A child/youth who experiences trauma must feel safe at school; their social-emotional developmental needs must be met. It is the responsibility of the educators in the building to ensure the emotional, physical, and mental needs of the child/youth are met.

Attachment

Children form attachments to their caregivers at an early age. Siegel (2006) explains that because the prefrontal cortex is developing in early stages of life, the manner in which caregivers communicate with children is vital in brain development. Communication from the caregivers is crucial in a child's early years because it "helps shape the right hemisphere's capacity for self-regulation, self-other relationship, an autobiographical sense of self, and the basic elements of the capacity of mindsight" (Siegel, 2006, p, 83). Paiva (2019) explains that different forms of harm to children pose both neurological impairments and are detrimental to normal developmental process. "Secure attachments are critical in how children see themselves in relation to the world around them and how they learn to navigate through various personal and interpersonal challenges" (Paiva, 2019, p.23). The absence of secure attachments an make it difficult for students to get along with their peers and teachers.

Attachment is important for children. It helps them to learn the skills to self-regulate, to create interpersonal skills and to build relationships with others. Through attachment, the prefrontal cortex is engaged. When this does not occur, the potential to debilitate students' capabilities in school exists. Problems in school, difficulties with peers and the inability to regulate or see themselves in the world, can have long-term effects and create systemic problems that may affect them in their future.

Systemic Problems of Childhood/Youth Trauma and Long-Term Effects

There is a great deal of evidence to support the impact trauma has on children/youth's learning. It is also important to note that untreated trauma can have long-term impacts on children/youth. Dong et al. (2004) suggests that adverse childhood/youth experiences may be associated with many risk factors later in life including obesity, smoking and depression all of

which can lead to heart concerns. Dong et al. (2004) study suggests that adults who experience

trauma in their childhood/youth may adopt unhealthy coping mechanisms to compensate for their

chronic stress.

Trauma survivors may enter their adulthood suffering from depression, anger and anxiety

as discussed by Dye (2018) who suggests that trauma survivors may have trouble sleeping, be

aggressive, have a distorted blame of self and others, and may experience memory problems. In

Dye's (2018) research, she shows a correlation between aggressive behaviours and self-reported

experiences of physical, sexual and emotional abuse and neglect.

Trauma can have a lasting and detrimental effect on children/youth. Simsek and Evrensel

(2018) ascertain that childhood/youth trauma may be related to issues such as suicide, aggression

and eating disorders. Dye (2018) explains that "… trauma survivors can suffer from depression,

anxiety, abandonment issues, unstable relationships, and other mental illnesses" (p. 389) and

these issues may plague them into adulthood. As well, studies show the correlation between

individuals who experience childhood/youth trauma and those with drug addictions (Garami et

al., 2019). "Lifetime traumatic events and the severity of childhood trauma have an important

role to play in the development and maintenance of addiction" (Garami et al., 2019, p. 444).

Unresolved trauma has the potential to impact children into adulthood thus decreasing their

ability to regulate behaviours as adults. Through education, teachers have the ability to alter

behaviours using approaches that may be effective for the childr/youth's well-being.

While the research shows that unresolved trauma can have a significant impact on

children and their learning, it also illustrates that it can have a detrimental effect on them as they

grow to into adolescents and adults. Creating trauma-informed classrooms and schools has the

ability to facilitate significant changes that can alter the outcomes for traumatized students and impact them academically, emotionally, physically and mentally.

Teachers Need Professional Development in Trauma-Informed Teaching and Learning

Students from diverse backgrounds can experience trauma. A loss of a family member, witnessing a disturbing incident or acts of bullying may be traumatic. "Exposure to potentially traumatic events such as child neglect, sexual, emotional, or physical abuse, family/domestic violence, sexual assault, interpersonal violence, school and community violence, serious accidental injury, catastrophic medical illness, traumatic bereavement or mass casualty events, is widespread" (Cook et al., 2019, p. 409). Students with trauma may exhibit behaviours that are unbecoming, disruptive and even malicious. However, there are also many students who experienced abuse. Sexual, physical, and emotional abuse can be the norm for many children/youth, and this can manifest into trauma for the children/youth. Students come to classrooms seeking a safe place; however, because trauma can mask itself in many forms, teachers may often mistake student behaviour and poor academic outcomes as behavioural issues and learning difficulties. Unfortunately, many educators may be unaware of the impact trauma has on students and may be ill-informed of the behaviours that may result.

 Teachers need to be reminded that it is essential to establish classroom environments that sustain trauma-informed approaches to learning and to teaching which can be difficult if educators are not given adequate professional development and training in the area of trauma-informed teaching. "Professional development is a critical component in creating a trauma-informed school, where understanding maltreatment's influence on learning and behaviour is a shared perspective and common language is applied in trauma-informed intervention strategies" (Paiva, 2019, p. 26).

There are universities, such as the University of Regina, which provide educational foundation classes for pre-service teachers that not only embed inclusive practices into the course, but also reviews the need for diversity in teaching. The University of Regina 2020/21 Undergraduate Calendar (2020) provides pre-service teachers with the opportunity to take the elective course EFDN 309: Social Issues in Education. The course objectives include understanding the societal issues that students face as well as providing methods to accommodate these diverse needs. This is an initial step in supporting trauma-informed teaching practices; however, a deeper understanding of trauma and skill development to facilitate students is needed.

Elective courses such as EFDN 309 may give pre-service teachers an understanding to some of the underlying issues that students may face; however, this might not be the case for all teachers currently in the field. There is a need to further educate teachers to not only understand trauma, but how to teach in a trauma-informed setting. Phifer and Hall, (2016) recognize that teachers are often left to learn on the job how to address these challenges and may not be aware of how trauma impacts their students. This lack of understanding can determine how teachers talk to their students, react to situations, and create assumptions about them. "A teacher's understanding of trauma's impact on the mind and the brain makes all the difference between reaction driven by an educator's understandable yet preventable frustration versus a sensitive and informed response empowered by knowledge, empathy and compassion" (Siegal, 2019, p. xv).

Bixler-Funk's (2019) dissertation explores the need for pre-service teachers to receive more professional development to ensure that once teachers leave their training, they will understand and be able to respond to the behaviours of young people living with trauma. She asserts that "university leaders must consider whether academic preservice programs contribute

to preparing them for the student population that exist in today's classroom" (p. 15). Bixler-Funk

(2019) also concludes through interviews with participants that the mentor teachers were not

adequately prepared to address the issues that occurred in the classroom, thus were not able to

fully coach pre-service teachers to handle the situations caused by trauma. Teachers currently in

the field also need to be provided with adequate support to ensure they understand the impact

and prevalence of trauma and are prepared to support their students in class. As trauma affects

students in many ways, it is essential that teachers at all levels of their development be informed

of the prevalence.

Becoming Trauma-Informed

There are four key elements that need to be considered when creating trauma-informed

approaches. The Substance Abuse and Mental Health Services Administration [SAMHSA]

(2014) explains the importance of "all people at all levels of the organization or system to have a

basic realization about trauma and understand how trauma can affect families, groups,

organizations, and communities as well as individuals" (pg.9). SAMHSA (2014) further

discusses the importance of caregivers to understand the impact of trauma, its effects and how

pervasive its impact can be. While Tebes et al., (2019) agree that it is vital to be aware of the

pervasive impact of trauma. They also acknowledge the importance of being able to recognize

trauma. SAMHSA (2014) reiterates this point explaining that through recognition, people in the

system maybe better equipped to respond appropriately. SAMHSA's (2014) third principle of

being trauma-informed is that the system or organization needs to apply "the principles of a

trauma-informed approach" (p.10) and respond to the trauma. They further explain that this "can

be accomplished through staff training" (p.10). Finally, SAMHSA (2014) explains that a trauma-

informed approach will work to ensure that traumatized individuals are not re-traumatized.

Trauma-Informed Classrooms and Schools

"Childhood trauma and its impact on youth functioning have received considerable attention across child-serving systems" (Crosby, 2015, p. 223). By using a trauma-informed teaching approach, teachers pursue an understanding of how the child/youth's life is affected by trauma (Crosby et al., 2018). When teachers learn to understand how trauma affects their students, they begin the process of better aiding their students. "As teachers grow in their awareness about trauma, not only in the lives of their students, but possibly in their own lives systemic changes should occur in the learning environment" (RB-Banks & Meyer, 2017, p. 68). It is through awareness, understanding and adaptations that educators could effectively impact the learning of students who experienced trauma. When teachers are "faced with their aggression, withdrawal, shyness, and inability to read social cues, caregivers have a tendency to deal with their frustrations by retaliating in ways that often uncannily repeat the children's earlier trauma" (van der Kolk, 2003, p. 310). Teachers need to remain calm, to understand that the behaviours the children/youth are expressing may relate to their trauma and to not react to the students' frustrations. Through understanding the effects of trauma and applying trauma-sensitive approaches, educators can ensure re-traumatizing behaviour is less likely to occur in their classrooms.

As educators, it is important to create a safe physical and emotional environment for students. Carello and Butler (2015) explain that a safe environment is one that ensures both the physical and emotional safety of students as well as fosters a conducive learning environment in which all students can successfully work. "When teachers create inclusive learning environments that are capable of harnessing the power of the brain's neuroplasticity, they help teens learn to regulate their stress response and participate successfully in school" (Craig & Sporleder, 2017, p.

30). Not only will creating inclusive environments help a student learn, but it can also contribute to their sense of belonging. Students need to feel safe in their learning environment and one way to ensure they do this is through teachers building strong relationships with their classes. "Traumatic stressors or prior deficits in self-regulatory abilities that manifest during adolescence, in absence of sustaining relationships, may lead to disruptions in regulation of affect, behavior, consciousness, cognition, and self-concept integration" (Cook et al., 2005, p. 393). This means the teacher/student relationship may be a reason a student is not able to deal with the traumatic events he or she has experienced. RB-Banks and Meyer (2017) suggest that teachers are on the frontline as they see first-hand the effects of trauma on their students. They may get the brunt of the student's anger or aggression. Thus, training is imperative for the classroom teacher as Craig and Sporleder (2017) explain:

> With little or no training in how to recognize or repair the effects of unresolved trauma on adolescent behavior, staff members attempt to increase interest and cooperation using a combination of high expectation, strictly enforced rules and severe consequences for noncompliance (p. 2).

It is the responsibility of the educator to handle these situations in the classroom; however, if teachers are not aware of how to respond to trauma behaviours, they may further affect children/youth's trauma. Interactions with students are important, and these interactions can be improved with trauma sensitivity (Crosby,2015). Traumatized children/youth need to be provided with many experiences in the classroom that build their capacity so that they move from simply surviving their trauma (Craig, 2008). Teachers trained to help students regulate their emotional state, to self-regulate, and to understand their own stress responses to the environment can help shift students' capacity to learn.

It is not enough to tell schools and educators to ensure their staff members practice trauma-safe environments. The teachers and administrators need to be properly trained to use practices that will ensure these children/youth get the support they need and deserve. "The new face of trauma is often invisible in today's classroom because traditionally childhood trauma is often seen as a domain for social workers or clinical psychologists" (RB-Banks & Meyer, 2017, p. 66). This does not have to be the norm. Teachers are frontline workers and have the ability to make positive connections with their students. They can improve the odds of a child/youth's success not only in school, but they can also help to make a change in their lives. A trauma-informed classroom and school can only be successful with educators who are invested in being trauma-informed as well.

Trauma-Informed Educators

Alexander (2019) states that the key to having a trauma-sensitive school and classrooms is having educators who are trained, empathetic, creative, and flexible in their approach to teaching students. "Trauma-sensitive schools aren't about implementing a certain program, using a specific curriculum, or creating a particular behavioral plan that makes the biggest difference. Rather, it is the people and the relationships that transform schools and make a difference for the kids in them" (Alexander, 2019, p. 74). Because teachers are mandated to meet curriculum objectives, teaching children/youth with trauma creates another tension for the educator. The pressure of the curriculum, combined with the challenges of teaching children/youth with trauma when faced with no training in trauma-informed teaching could cause teacher burn-out (Morton & Berardi, 2018). The key to meeting these challenges and retaining teachers was to expand their knowledge of trauma, there effects and provide training to facilitate students' learning. When educators understand the root of the behaviours, they are much more capable of responding in

ways that are compassionate and help students feel safe in the school environment (Overstreet &

Chafoules, 2016).

In order for schools to be trauma-sensitive, there needs to be a whole school approach.

The Trauma and Learning Policy Initiative [TLPI] (2019) recognizes that there needs to be a

whole-school approach to creating a trauma-sensitive school environment. They suggest that no

one teacher can create this environment and that a concerted effort from everyone in the school

needs to take place. The entire culture of the school needs to reflect the trauma-sensitive practice

(Walkley & Cox, 2013). Crosby (2015) states that if administration, professional staff, and

policies are sensitive to the students' needs, then student performance and behaviours would

improve. He also states that a trauma-sensitive model also reduces staff and student stress as well

as suspensions and expulsions. As school leaders can set the tone of the school, it is imperative

that they lead by example and implement this approach. "Commitment to adopting a trauma-

informed approach will require the full support and commitment of the leadership at each school,

starting with the principal or coprincipals" (Walkley & Cox, 2013, p. 125). The principal must

believe that academic success is dependent on focussing on the social and emotional needs as

well as adhering to the belief that addressing trauma will promote school success (Dorado et al.,

2016). Sadin (2020) also attributes this success to having school leaders who understand trauma-

informed care. Leaders need to encourage teacher self-care, allow staff to be aware of their own

childhood/youth exposure to trauma and help staff respond to all students in a trauma-informed

manner (Sadin, 2020). When teachers learn more about how to help students impacted by trauma

and are engaged to learn more, their own health and wellness is bolstered (Dorodo et al., 2016).

Wolpow et al., (2009) reiterates the idea of creating a trauma-sensitive environment in

his definition of compassionate schools. "Staff is trained to practice thoughtful and intentional

kindness. They show authentic care for their students in structured, measurable ways. Unconditional respect and empathy for students is expressed consistently" (p. 18). It is through training in trauma-informed practices that educators will be able to navigate through the behaviours and understand the underlying issues that can prevent students from learning and succeeding in school. It is imperative that trauma-informed teachers are equipped with teaching practices that will enable them to better serve their students.

Trauma-Informed Teaching Practices

Alexander (2019) identified trauma-informed schools as ones where students and adults felt safe, could build caring relationships, are able to regulate their feelings and behaviours and are able to learn. "The trauma-informed approach is not viewed as a separate set of activities or an occasionally-used set of tools, but as a paradigm shift with its attendant content domain foundational to helping children master academic and social challenges throughout their schooling" (Morton & Berardi, 2018. P. 489). This shift requires that guiding principles became the foundation for schools to embrace.

In his book, *The Heart of Learning and Teaching*, Wolpow et al. (2009) set out principles that may help educators maneuver through the trauma-informed teaching process. These principles are developed because professionals are seeking a "deeper understanding of learning and teaching for students impacted by chronic stress and trauma" (Wolpow et al., p. xiii). In order to be responsive to students affected with trauma, Wolpow et al. (2009) first explain the need to understand how trauma affects children/youth and families. This led to the development of the principles that teachers can use in their classrooms to help students who suffer from trauma. Principle one: "Always empower, never disempower" (p. 72). Here the authors explain the importance of fostering resiliency. Wolpow et al. (2009) encourages teachers to avoid power

struggles and ensure discipline does not resemble the trauma the students have previously

experienced. It is imperative that yelling, threats, and sarcasm are avoided and replaced with

consistent and respectful conversations. Rishel et al. (2019) echoes this in their observations

from the Trauma-Informed Elementary Schools (TIES) program. Training helps to prepare

teachers to manage their own responses to student behaviours. This training also provides

teachers with the ability to "create the sense of safety children need; and help children build the

skills needed to understand, manage, and express their own feelings" (Rishel et al., 2019, p. 242).

The second principle Wolpow et al. (2009) illustrates is the need to provide

"unconditional positive regard" (p. 72). The authors state that students who are struggling

because of trauma "don't need another adult to tell them what is wrong" (p. 72). Wolpow et al.

(2009) point out that educators need to treat students with sustained kindness and empathize with

their challenges. Alexander (2019) states that the trauma-sensitive school meets the needs of the

students by providing a safe and respectful community through positive school relationships.

These relationships are "marked by genuine care, atonement, and reciprocity to ensure that all

feel safe and secure enough to take the risks necessary for learning" (p. 66).

The third of Wolpow et al.'s (2009) principles look at the importance for educators to still

maintain high expectations for the students while also providing consistency in their

expectations. "Consistent expectations, limits and routines send the message that the student is

worthy of continued unconditional positive regard (love) and attention" (Wolpow et al., 2009, p.

73). Alexander (2019) explains that using multi-tiered systems of support (MTSS) approach can

help educators meet the diverse needs of students by providing "high-quality instruction and

interventions matched to student's individual needs … so that learning is actualized for each

student (p.70). To implement this, Alexander (2019) explains that teachers need to recognize

that some students will need individual plans while others may need more support; however, it is

imperative that all interventions should be done through a trauma-informed approach. MTSS

"requires a focus on both prevention and intervention in relation to *all kids*, extra support for

some kids and then intense individualized planning and programming for a *few kids*" (Alexander,

2019, p. 70).

      Another principle Wolpow et al. (2009) addresses is the need for trauma- informed

educators to see themselves as relationship coaches. By doing so, the teacher can help the

students understand their own self-worth and help to provide insight into their struggles

(Wolpow et al., 2009). They teach students how to get along, how to build and maintain

relationships and how to work together (Alexander, 2019). Johnson (2017) explains the

importance of educating students about their emotions, arousals, and trauma models. By doing

so, students have a clearer understanding of what is needed to regulate behaviour, what can cause

triggers in their behaviour and to learn how to regulate their behaviour.

      As many schools have adapted models that have helped them to achieve success in

educating students with trauma, the following three examples illustrate ways that have been

effective in their schools. The Missouri Model is based on the following principles: safety,

trustworthiness, choice, collaboration, and empowerment (Carter & Blanch, 2019). Through this

model, educators are tasked to be trauma-aware, trauma-sensitive, trauma-responsive, and

trauma-informed. By addressing trauma, having a common consistent language, and providing

in-depth training, Carter and Blanch (2019) show the effectiveness of programs like the Missouri

Model. Other schools have adopted the TIES model which also focuses on trauma-informed

practices but provides early intervention at the elementary stage (Rishel et al., 2019). Animating

Learning by Integrating and Validating Experience (ALIVE) program is a school-based, trauma-

informed program that is grounded in a public health framework for success (Frydman & Mayor, 2017). The main contributor of each of their successes is in training of the educator in trauma and creating a safe environment for learning. "Safety is a necessary precondition to a learning-conducive environment, and this is especially true when teaching content that includes trauma" (Carello & Butler, 2015, p. 264).

Keeping everyone safe in school is of the utmost of importance. In order to do so, staff and students need to understand what trauma is and its effects on the brain, on learning and on self-regulatory practices. Understanding is only possible when all stakeholders are vested in their own learning and are committed to helping students achieve academically, socially, and emotionally. Sadin (2020) states that each person in the building should be taught about brain development and the impact of adverse experiences. By ensuring professional development in trauma-informed practices is provided, educators and administrators in schools will be better able to serve the needs of all students.

Ensuring teachers are equipped with trauma-informed teaching practices is vital in helping the students to learn and to regulate behaviour. Teachers not only require professional development, but they also need to be able to accept and support the trauma-informed ideas, to the practices and be able to let go of their own challenges that may be impeding them from helping students.

Challenges Implementing Trauma-Informed Approaches

There are many challenges that can occur when trying to implement trauma-informed teaching methods and creating trauma-informed environments for students. Challenging traditional views of teachers, getting an entire school staff to advocate for a trauma-informed

approach and teachers being able to handle adverse situations can impact change. Even if

educators are able to change their perspective, changing their practice can be a challenge.

The first challenge is having the educators dismiss their traditional views of education

and look towards a new approach. "There are inherent challenges in altering the traditional

approaches to student behavior in school settings" (Walkley & Cox, 2013, p. 124). Hodas (2007)

explains that often long-time teachers have difficulty letting go of the traditional approaches and

adapting to new approaches. Without teacher agreement, a trauma-sensitive approach will not

meet students' learning needs. Hodas (2007) also attributes that some of the challenges this

method poses is in the ability to adapt to new approaches and to navigate through the behaviours

of some students. He explains that confronting the students or disciplining them is not

appropriate in a trauma-informed environment. These reactions can manifest into larger

problems. Dorodo et al. (2016) feel that educators need to see children/youth in trauma as those

in need of help rather than seeing them as problem children/youth. Dorodo et al. (2016), also

state that there needs to be a mind shift from asking the question 'What is wrong with you?' to

"What has happened to you?" This approach could challenge the typical views of educators.

The second challenge requires a whole school approach. Morton and Berardi (2018)

claim that for trauma-informed school programming to work, a collective effort from every

member of the school community must be committed. "… [From] school board members to bus

drivers, credentialed and non-credentialed staff alike: all persons regardless of roles are

instrumental to creating a unified, cohesive trauma-informed environment promoting student

learning and development" (Morton & Berardi, 2018, p. 491). Hodas (2007) explains that for

some staff, they will see this lack of discipline as "being soft" (p. 56) or manipulating the

situation. Hodas (2007) explains that lack of understanding by the staff educating students who have experienced trauma can be problematic.

The third challenge in creating a trauma-informed school is having staff that can handle the adverse situations that may arise. Staff need to be able to not allow children/youth's emotions and behaviours to escalate their own reactions. This is why it is vital for staff to avoid punitive consequences. McInerney and McKlindon (2014) state that re-traumatization can occur when punitive measures are applied to the students' actions.

The fourth challenge facing teachers is the rising levels of aggression in the school. This may impact teachers' willingness to adopt new approaches. While studies show that many Saskatchewan children/youth are victims of abuse, it also important to note that incidents of violence are entering the schools. Charlton (2019) reports the level of abuse Saskatchewan school-support staff faced in his November 26, article. He shares the need for proper means of support and resources. He also poignantly states "only by better understanding and addressing the root causes of the violence can we more effectively prevent violence in our schools" (Charlton, 2019, para. 13). If educators are fearful themselves, they may not easily adopt new approaches.

Teaching is a demanding profession. As such, teachers need appropriate training and support so that they are well prepared to address the adverse situations that trauma can create. Students' outbursts, behaviours and even what appears to be their obstinate objections for assistance, can be taxing. It seems unfair to ask an educator to create a trauma-informed classroom, a trauma-informed approach and to fully understand how a change in their practice can create positive results for their students without first providing educators with the professional development they need to assist them.

Professional Development

There has been much research on effective professional development for teachers over the years. Earlier researchers in this field, like Darling-Hammond and McLaughlin (1995) have identified that effective professional development will have characteristics that allow for collaboration and collegial learning. Research also suggests that professional development that focusses on specific practices that allow for active learning is important for teacher learning (Desimone et al., 2002; Reimers et al., 2015). Effective professional development also enhances teachers' content knowledge as it "promotes deepening of, both subject content knowledge and pedagogical knowledge" (Reimers et al., 2015, p.45).

Trauma-Informed Professional Development

Dealing with trauma can be difficult and present many challenges for teachers. However, providing professional development for teachers can be an effective tool to support teachers and assist them in supporting students who are experiencing trauma. Kunst et al. (2018) attest that professional development is important in improving knowledge and skills for teachers.

Educators are expected to be life-long learners. "Teachers' expectations are influenced by the experience and knowledge they acquire during their education for the teaching profession" (Makovec, 2018, p. 34). However, teachers' education is not limited to the experiences they acquire in training for their careers. Teachers use professional development to grow, improve and change. Lachner et al. (2016) explain the importance of providing teachers with an abundance of learning opportunities that will expand their learning and growth as educators. Osman and Warner (2020) characterize professional development as opportunities to develop teacher knowledge, to improve their instructional practice and create positive change for their students. Thus, for educators to truly improve outcomes for students who experience trauma,

there needs to be a commitment to professional development in the area of trauma-informed learning and teaching.

"Professional development is an important aspect for teacher growth. To foster positive change for student outcomes, leaders must organize professional development opportunities that will improve their knowledge which then translates to positive change" (Osman & Warner, 2020). Clarke and Hollingsworth (2002) share that effective professional development allows educators the opportunity for active learning and helps them to grow in their profession. They affirm that professional development is a process that is moving from something that is done to teachers to learning which facilitates growth and reflection. Professional development in the area of trauma-informed teaching and learning has the ability to help educators understand the trauma facing children/youth and to give them the support they need to create a trauma-informed learning environment for children/youth.

Professional development in trauma-informed teaching needs to have several components. As Anderson et al. (2015) pointed out, there are four areas that need to be covered. First, Anderson et al. (2015) explains the information on the impact of trauma and the toxicity it has on children/youth's behaviours and their learning is paramount. Second, Anderson et al. (2015) suggests that teaching positive behavioural strategies is key to helping alleviate the stress in the classroom. Third, the authors shift focus to stress reduction and relaxation techniques which ultimately can help students learn to self-regulate. Finally, Anderson et al. (2015) suggests that cognitive behavioural strategies for classroom intervention should be covered in the professional development as well.

McInerney and McKlindon (2014) illustrates the importance of educator training in the area of trauma-informed practices. In their framework, they address the importance of

strengthening relationships between staff and children/youth who have experienced trauma. They

also look at how training is imperative in helping children/youth learn to regulate emotions to

help them with academic and social issues. The National Child Traumatic Stress Network (2017)

encourages educators to learn how to screen for trauma exposure. Children/youth may

experience a change in behaviour, have increased stomach aches or headaches, and start to

experience heightened fear and anxiety. These are important indicators educators need to be

made aware of to help them first recognize the possibility of trauma to foster trauma-informed

decisions in their practice.

Online Professional Development for Trauma-Informed Learning and Teaching

While professional development for teachers is an expectation of their practice, the

traditional face to face delivery can be costly, can be difficult to acquire due to physical distances

impeding access to the professional development, and can be restrictive in the time the

professional development opportunities are held. Offering online opportunities for teachers can

alleviate these barriers, which will provide them the opportunities for effective professional

development. Bragg et al. (2021) explain that structured, formal online professional

development results in changes to teachers' knowledge and their practice. Brag et al. (2021) also

points out that online professional development can be more effective than a traditional approach

because it is learner-centered, improves content knowledge, fosters collaborations and social

participation. Dille and Røkenes (2021) claim that online professional development not only

alleviates the distance barriers, it also provides the teachers with a learning anytime opportunity.

Teachers can access online professional development when it fits their schedule. Dille and

Røkenes (2021) also explain that online professional development provides teacher engagement,

allows for conversations to continue, and provides opportunities for communication and

collaboration. In order to continue to encourage professional development in trauma-informed teaching and learning, it is imperative to provide online opportunities for teachers and online resources that are readily available and easily accessible.

Professional development must be designed to meet the needs of teachers and to ensure that the delivery has a learner-centered focus. Bragg et al. (2021) share key elements that are important in creating effective online professional development. This includes ensuring different learning styles are met by providing opportunities for readings, practice and discussion. The authors discuss the need for practical learning such as hands-on activities and real-life situations. The authors also contend that a variety of learning materials are important. "The teachers seem to prefer a representation of combined multimodal learning materials" (p.10). Ansyari et al. (2022) attest that the teachers were averse to professional development that relies heavily on digital reading as it "… does not fully accommodate there different individual learning preferences" (Ansyari et al., 2022, p.10). In fact, in their study, 73.9% of the participants preferred having audio-visual learning materials in their online professional development.

The importance of teacher engagement is also highlighted by Bragg et al. (2021). Teachers need to collaborate and have social interactions with one another. It is important that the material be relevant to the teachers and encourage continuous reflection. Bragg et al. (2021) also highlight the importance of flexibility. Teachers need to be able to engage in self-directed learning at their own pace and have access to resources that will support their learning. This idea of the importance of flexibility is echoed in the Dille and Røkenes (2021) study. The authors share that participants emphasized the importance of being able to learn at anytime. One participant in this study concluded that the "online component made it so that none of our conversations ever had to stop" (Dille & Røkenes, 2021, p.12).

Ansyari et al. (2022) discuss teacher preference for online professional development. In their findings, Ansyari et al. (2022) assert that 94.4% of the teachers had a positive attitude toward online professional development and that asynchronous was preferred. The study also showed that 67.9% of teachers preferred that the professional development was collaborative and 75.2% wanted the training or workshop to be short in duration.

Online professional development can support teachers. It can provide equitable access to high quality learning opportunities (Lesiak et al., 2021). Online professional development provides not only flexibility but also can create a space for collaboration and support. (Lesiak et al., 2021; Bragg et al., 2021).

Resources Available for Saskatchewan Teachers

Teachers in Saskatchewan have online resources available to them through their Ministry of Education and through their provincial teachers' website – Saskatchewan Teacher Federation (STF). The Saskatchewan Ministry of Education ("Education and Learning", n.d.) has resources that address some of the violence and abuse that children/youth and families face. One such report, "Interpersonal Violence and Abuse: Response to the Domestic and Violence Death Review 2019" details actions that educators should take when dealing with items such as disclosure, duty to report, prevention and intervention and accountability. The resource concludes with an action plan that focuses on providing means of support for prevention of violence, educating students about healthy relationships, and training for victim's services programs. While the Ministry of Education does acknowledge that violence affects students, it does not address the need for training of their educators to support these students.

In a second resource also found on the Saskatchewan Ministry of Education website, "Guide for Children Exposed to Violence Programs in Saskatchewan" (2010), the resource does

discuss the impact of violence on children/youth. It addresses the need to make sure those who

work with students have a clear criminal record check, and that services for children/youth are

accessible. This resource also outlines the duty to report and to ensure the rights of the

child/youth are respected. It also calls for 'appropriate persons' (p. 22) to be hired to deliver

programs for students. There is no information within the resource that helps educators

understand how to create a trauma-informed environment in their own class or school.

In the 2019-2020 Annual Report for the South East Cornerstone Public School Division,

this Saskatchewan school division recognized the need to provide trauma-informed learning due

to the effects Covid-19 created. Webinars were created for educators who were experiencing

"burnout and fatigue" (p. 18). South East Cornerstone school division, in their work with

provincial partners in mental health, provided trauma-informed practice training modules for

staff.

The province of Saskatchewan also has a provincial teachers' website which is hosted by

the STF (Saskatchewan Teacher's Federation, 2021). This website hosts resources for teachers.

The Trauma-Informed Practice and Schools (2021) link on the STF website, leads teachers to

several resources. These include trauma education resources from Alberta, British Columbia, and

Manitoba and from the Treatment and Services Adaptation Center but there are no direct links to

resources from Saskatchewan.

Many resources are available for teachers and school staff to learn more about trauma and

how to help students who are experiencing trauma. The Crisis Trauma Resource Institute

(CTRI), which is located in both Canada and the United States, offers both free and cost-

effective resources and webinars as well as workshops which are available both in person and

online. Educators can choose from a variety of webinars and workshops that can help them to

understand the complexities of children/youth who are dealing with trauma, while also providing

strategies that they may employ to help them navigate through the issues they face in the

classroom. The CTRI helped educators to understand the impact of trauma while supporting

them with current professional development that could better equip them to teach children/youth

in need.

There are other online resources and books that are available for teachers who require

more information on teaching students in trauma and how to create trauma-informed classrooms.

Many provinces in Canada have resources online that provide resources for educators. British

Columbia's Ministry of Education website (Education, 2019) provides educators with online

resources that help teachers understand what trauma is and how it effects students as well as

basic information on the effects of stress on the brain. The province of Alberta also shares

resources on its Government of Alberta Ministry of Education website (Trauma-informed

practice, n.d.) in relation to creating a trauma-informed classroom and environment. Like British

Columbia, its resources give information on the brain, intervention ideas and links to other

websites. Although having resources readily available is important, what is imperative is for

educators to first have professional development that accurately informs them about their

students' needs, so that the resources will be more impactful.

Chapter Summary

Professional development is the cornerstone to improving practice in education. As

educators learn more about the effects of trauma, how it can manifest in the behaviour of a

child/youth, and how it can impact their education, they can understand why it is imperative to

create a trauma-informed environment. By learning how to change their approach, teachers will

be better equipped to address cognitive difficulties and behavioural issues associated with the

effects of trauma. "When professionals are unaware of children's need to adjust to traumatizing environments and expect that children should behave in accordance with adult standards of self-determination and autonomous, rational choices, these maladaptive behaviors tend to inspire revulsion and rejection" (van der Kolk, 2005, p. 404). It is with knowledge and understanding that teachers can change their practice and make a meaningful and lasting impact on the child/youth.

Trauma-informed teaching practices seem to be an obvious means to improve the outcomes for students. However, there are many reasons why it may not be happening in schools or being offered as professional development to educators. Possibly, it may be uncomfortable to talk about trauma. Educators may be facing their own unresolved trauma and addressing this in the classroom can create a resurfacing of a teacher's own traumatic experience. For some educators, conversations about trauma may not appear to be normalized within the classroom. If it is uncomfortable to talk about it with students, then it may be uncomfortable to address it with students. Teachers may also see this as not their job. They are not trained to be counsellors and addressing trauma issues in the classroom may be seen as trying to be someone they are not.

Other reasons that a trauma-informed practice may not be present in the classrooms is because for some teachers, there is a lack of awareness about trauma. This can lead to assumptions and misjudgements. When educators do not know, they may make assumptions about their students' efforts and behaviours. It is only through professional development that assumptions can be challenged and conversations about trauma can be normalized. By advocating for professional development that allows for the normalization of trauma, challenges, assumptions, and misjudgements that may be held by educators, and by providing tools for

educators to create trauma-informed environments, positive changes will happen that may impact students, student learning and student behaviours.

From my review of the literature, it is evident that children/youth who are affected by trauma may experience behaviours that are not conducive for their learning. Professional development designed to support educators in further developing their knowledge and skills, needed to better support children/youth's learning is key to assisting student learning and helping them to ameliorate the effects of trauma. "Implementing a trauma-sensitive lens, professional development for staff, adding social-emotional learning to the curriculum, and shifting policy to reflect trauma-informed approaches enables a culture of trauma-informed perspective in school settings" (Paiva, 2019, p. 27). While the research shows that there is an abundance of information and tools available for teachers to help students navigate through their trauma, it does not specifically target what Saskatchewan teachers understand about trauma or how they understand its impacts on student learning and behaviour. Unless Saskatchewan teachers are aware of the effects of trauma, the prevalence of trauma, and are shown ways to adapt their practice to help students who are suffering from trauma, teaching methods may not be able to fully support those students who are impacted by trauma.

Chapter 3: Methodology

Introduction

This practitioner action research study explored how online professional development in trauma-informed teaching could positively impact Kindergarten to grade 12 teachers' practices and may support change in their classrooms. By using a practitioner action research approach, which is "orientated to action or cycles of action to address an issue or concern" (Anderson & Herr, 2010, p. 313), this study aimed to answer the following three questions: 1. What do teachers understand about the effects of trauma on student learning? 2. What professional development support is needed to support educators? 3. How could online, blended and distance education play a role helping teachers support students with trauma?

Paradigm

The study was designed with a pragmatic approach. Kelly and Cordeiro (2020) explain that through pragmatic inquiry, actionable knowledge can be derived. "By emphasizing this principle of actionable knowledge as a starting point for research, researchers can develop research agendas anchored in respondent experiences and hence, ensure research is of practical relevance" (Kelly & Cordeiro, 2020, p.3). In this study, participants were able to share their understanding of trauma and how it impacts behaviour in their classrooms. One of the principles of pragmatic inquiry is to provide the opportunity to explore the interconnectedness of experience with knowing and acting (Kelly & Cordeiro, 2020). Therefore, the experiences of the teacher-participants were used as a catalyst for understanding of what they know about trauma-informed teaching and learning and provided them with "useful practice-based knowledge" (Kelly & Cordeiro, 2020, p. 5).

Methodology

As indicated, the study took a practitioner action research approach. Anderson and Herr (2010) articulate that practitioners acquire knowledge through their years of practice and through the formal acquisition of knowledge. Practitioner action research "requires a more intentional plan of reflection which includes identifying a question of interest and planning how to answer it; considering who will be involved, what data will be collected, and how the data will be analyzed" (Fuentes, 2013, p.52). It also has the ability to "[produce] knowledge that is uniquely suited to the realities and contexts of practitioners" (Anderson & Herr, 2010, p. 314). Shaw and Lunt (2018) explain that practitioner research serves a practical purpose as it has elements of both practice and inquiry, and Morales (2016) stated that "teachers become agents of change through action research" (p. 162). Therefore, teachers who are immersed in their classroom environments have a rich understanding of the challenges that they face. Cheng and Li (2020) claim that teachers are considered the insiders of teaching practice, so they have a better understanding of the problems and solution in classroom situations. By using practitioner action research approach and by encouraging participants to act, changes to teaching practices can occur. Anderson and Herr (2010) argue that through action-orientated research "results can be used for immediate transformation of practice" (p. 313).

The practitioner action research study was initiated with a survey that included questions that allowed for open-ended responses. Anderson and Herr (2010) claim that practitioner action researchers "conduct research "with an eye toward greater understanding, change and improvement in their local sites and themselves, as well as contributing to the larger knowledge base in their field" (p. 313). By using real situations and focusing on real problems in the classroom, teachers in this study have the potential for transformation change in their own

classrooms. For this reason, participants were invited to share through the survey responses, what their current awareness of the impact of trauma on students. The second part of the research was the online Moodle. The information on the Moodle platform was derived from experts in the field of trauma and focused on areas that the researcher identified from the survey as areas for further growth or discussion. As the purpose of this research was to encourage educators to shift from traditional approaches to trauma-informed ones, the participatory action involved in this study enabled them to discuss possible changes in teaching practice. As such, the Moodle questions were developed to encourage respondents to make connections to the material, reflect on their own practice and collaborate with each other. The participatory action helps teachers foster their professional growth and reflect on their own practice (Ginns et al., 2001).

Using practitioner action research provided the opportunity to look within teacher practice to investigate what needs are pertinent to each teacher's practice. As such, participants were invited to participate in an interview with the researcher. Interview questions were created to encourage reflection of the participants. "Reflection consists of exploring personal beliefs, thought and action in a deliberate and critical way that often becomes part of the action-research cycle" (Morales, 2016, p. 160). The interview also sought to determine if the learners strengthened their understanding of trauma, if they would change practice moving forward and attempted to determine what they felt was still needed for teachers in Saskatchewan based on their new understanding and if online professional development could be an option for Saskatchewan teachers. Reflective practice is essential in education as it puts educators at the center of their own learning while empowering growth and change in their practice (Morales, 2016). As such, the interview questions were derived to provide an opportunity for reflection as well as provide the participants to share their recommendations for next steps. It was important

to have the participants of this study see themselves as contributors to the research and feel that

they are shaping the direction of the professional development, and then they will be more likely

to be agents of change through action-research (Morales, 2016).

Specific Procedures

This research was divided into three stages. To begin, participants were asked to partake

in an online survey to assess their current levels of understanding about trauma-informed

learning and teaching (TILT) and their adaption to TILT practices. Using the online survey

platform, Survey Monkey, demographic information from the participants was collected. In the

second part of the survey, open-ended questions were asked of the participants to determine their

level of understanding of the impact of trauma on students and their learning. By gathering

information about their previous professional development opportunities in relation to trauma-

informed teaching and learning and what they already understood about trauma and its impacts,

the survey results helped to establish the information for the second stage of the research. The

questionnaire can be found in Appendix 1.

The second stage provided participants with access to a short online, interactive

professional development session. The professional development online information course

description can be found in Appendix 2. Participants were given access to the online platform,

Moodle. Moodle is an open-source learning management system that is used for distance

learning. First, the professional development presented relevant Canadian, and specifically

Saskatchewan, statistics about trauma, maltreatment, and abuse of children/youth. The second

part of the professional development presented research on the growing brain, how trauma

affected learning and behaviour. The goal of the professional development was to have educators

review the information, discuss the research, and ask questions. The interactive, online

professional development provided links to resources that may be beneficial to teachers in their own practice, as well as to encourage conversations between participants about the effects of trauma in the classroom. These links were chosen because of their affiliation to reputable universities and organizations whose research focuses on social work, family and children/youth and the impact of trauma. After each short section, participants were given a reflective question on the Moodle platform where they were provided the opportunity to interact with each other, if they felt comfortable. Resources were also provided to the participants in the final section of the Moodle. These resources were provided as a result of participant online questions and comments from the survey and the Moodle.

The final stage consisted of an interview with each of the participants. This focused on observations and conversations that evolved during the previous two stages. It was important for the interview to encapsulate the participants' understandings of trauma in the classroom and attempt to capture their growth. Shaw and Lunt (2018) state that there needs to be a focus on practitioners' own practice, therefore, the final interview questions drew attention to educators' own practices and helped them to reflect on what changes they may see in the future for their classrooms. While all participants were given the same interview questions, participant responses sparked further discussion as the participants reflected on their practice, shared experiences in the classroom and discussed what they felt was needed in professional development for their schools and divisions. Heikkinen et al., (2016) states that it is important for the practitioner-researcher to "give space to different voices and interpretations of the same events to the authentic voice of the participants to keep them as genuine and original as possible" (p.13). The interview questions can be found in Appendix 3.

Research Population

According to the Saskatchewan Teacher's Federation website, *Who We Are* (2021) there are over 13,500 teachers currently employed in the province. There are 27 school divisions in Saskatchewan – 18 public, 8 Roman Catholic and 1 Conseil Scolaire Fransaskois (K-12 School divisions in Saskatchewan). Based on this information, Saskatchewan teachers were invited through Twitter to join in this study. The social media post can be found in Appendix 4. An open call, using social media, was used to invite teachers to participate. "Given the relevance of social media to various stakeholders, it has received significant attention from researchers of various fields" (Kapoor et al., 2017, p. 531).

Recruitment

Using an open call on the social media platform, Twitter, Saskatchewan teachers from both elementary and secondary levels, school administrators and learning resource teachers initially volunteered to participate in this study. By using Twitter as a recruitment tool, it "offers an equitable benefit to all academics who participate" (Klar et al., 2020, p. 1). "To a large extent, online communities have been successful in bringing people together with similar interests and goals …" (Kapoor et al., 2017, p. 532). This open call request attracted only 15 teachers. The teachers who volunteered have a various levels of teaching experience with an array of teaching experiences at different grade levels and were from both rural and urban areas in Saskatchewan. While the study began with 15 participants, 13 completed the survey and only 11 completed all aspects of the research.

Ethical Considerations

Upon receiving ethics approval from Athabasca University, teachers in Saskatchewan were invited through Twitter, to participate in this research. Each participant was asked to sign a

written consent at the beginning of the study. Anonymity was a priority. Names of teachers and

schools are not identified in this study to ensure the identity of the school and community are

protected. In the informed-consent form, they agreed that their participation is voluntary and that

responses on the Moodle website are to remain confidential and not be discussed outside of the

Moodle forum. This was re-iterated on the Moodle forum as well. This was imperative so to

ensure there were no associated links to students. School divisions are also not named as

Saskatchewan is relatively small, and it is vital that privacy be maintained. It was important to

build a climate of trust and transparency, so that teachers would feel safe to participate knowing

that the anonymity of their students and of themselves was protected. Participants were assigned

a number when referring to their responses within the Moodle and their interview.

The emotional risk for teachers was considered in the ethics proposal. While learning

about trauma and discussing it may be upsetting, all participants could withdraw from the project

at anytime during the research. While the Moodle course encouraged participant online

interaction and reflection, the opening comments on the forum assured participation was

voluntary. As all participants are members of the Saskatchewan Teachers Federation (STF), they

were reminded on the Moodle platform that they have access to well-being resources through

their federation and the links to these resources were made available.

Data Collection and Research Findings

Qualitative data was collected throughout the research process. Flick (2013) explained

that qualitative data analysis "is applied to discover and describe issues in the field or structures

and processed in routines and practices" (p.5). As classroom teachers are in the midst of dealing

with learning difficulties and behavioural issues that may be attributed to trauma, a qualitative

approach was necessary. Flick (2013) outlines three aims of qualitative data. First, to describe

the subjective experiences, second, to identify explanations and third, to develop a theory.

To answer the research questions, qualitative data was collected from three sources. First,

it was derived from the online questionnaire. This information was used as a needs assessment

which determined what professional development was required in trauma-informed learning and

teaching. The questionnaire was comprised of questions that determined years of experience,

teaching experience and helped the researcher to understand the professional development

teachers have previously had in the field of trauma-informed learning.

Second, information was gathered from the data provided by the participants through

their questions and reflections during the professional development stage, which was the online

Moodle course developed by the researcher. While the researcher created the course, the material

was derived from the literature from this study. In this stage, participants were invited to

participate in a short online, professional development overview that explained the prevalence of

trauma in Saskatchewan, how trauma affects students, and it provided strategies for helping

students in the classroom. The participants were able to share their concerns and talk with

colleagues from the group. They were invited to reflect on their own classroom environments,

their own understanding of behaviour and learning, and engage with the other participants.

Finally, once participants completed the short, online professional development, they

were invited to participate in a semi-structured interview, Appendix 3. The interview looked at

their depth of understanding of trauma determined if their perceptions on learning and behaviour

had changed. Bartlett and Varvus (2017) explain that the use of semi-structured interviews

"attend to the processural nature of conversation and the social dimensions of knowledge

production" (p. 55).

Once the data was collected, a thematic analysis began. "Thematic analysis is a method for identifying, analysing and interpreting patterns of meaning ('themes') within qualitative data" (Clarke & Braun, 2006, p.79). After carefully reading the questionnaires, the data added by participants to the online professional development, and the interviews, the researcher looked for themes, pulled connections from the data and determined what the participants are saying about the research. Using Xu and Zammit's (2020) thematic analysis approach to interpreting data in practitioner research, the qualitative data from the survey as well as capturing the participants' responses was captured through the coding process.

To code the data, the researcher looked for common themes or messages about trauma which were provided by the participants in relation to each of the following: a) what teachers knew about trauma and trauma-informed learning and teaching; b) what teachers understood about their role and ways that they could affect learning and behaviour in the classroom; and c) understanding how teachers felt about the need for professional development in the area of trauma-informed learning and teaching. Analysis of the data was an important step in interpreting the data (Flick 2013). Once codes were developed, the researcher looked for themes that emerged from the participants' responses. These themes were then looked at in relation to the research question. It was important to code the participant responses to find themes that occurred. Flick (2013) stated that coding the data was a key approach to understanding the data.

Analysis of the data followed Braun and Clarke's (2006) six step guide to conducting analysis. After initially becoming familiar with the data, the second step was to generate initial codes. Once codes were developed, the third step was to search for themes and review them. Following the review, themes were defined and a closer look at how they were related to each

other occurred. This led to the final step of Braun and Clarkes' (2006) guide to conducting analysis, which was writing-up the research.

Qualitative Data

"Qualitative research involves reporting how people talk about things, how they describe things, and how they see the world" (Creswell, 2016, p. 6). To capture the participant's responses to how they viewed trauma, how it affects their students and the prevalence of it, I manually coded the qualitative data acquired from their Moodle responses and interviews. "A key data organizing structure in qualitative research is coding" (Williams & Moser, 2019, p. 46). As I reviewed each of the participant's responses, I identified codes from their words and sentences that conveyed similar meanings. I began this process by doing an initial line-by-line reading of the material and obvious codes were highlighted. I searched for similar words, phrases, and concepts. If "the data collection and organization methods lack rigor, analysis can be impeded, in turn minimizing the value of outcomes" (Williams & Moser, 2019, p45). On subsequent reviews of the material, codes were grouped into themes. Table 8 summarizes the themes and codes used to analyze the data. "Central to the coding process is ensuring that coding procedures are defined, rigorous and consistently applied in order to conform with validity and reliability standards associated with qualitative research (Williams & Moser, 2019, p47).

Chapter Summary

Hattie (2003) asserts that for students to be successful, quality teaching needs to be evident and that will only occur when teachers commit to professional development. He said that "expert teachers are proficient in creating optimal classroom climates for learners" (p. 7). For teachers to fully recognize our students' needs and to create optimal climates, teachers not only need to learn about their students, but also need to make informative changes in their practice to

impact students. This study discovered what eleven teachers in the field understand about trauma and its effects. By looking through the lens of a practitioner action researcher, this study foregrounds the need to support Saskatchewan teachers with professional development in trauma- informed learning so that they can impact change in their classrooms and shows how this support can be achieved through online resources and blended learning opportunities.

Chapter 4: Research Data and Findings

The purpose of this study was to identify what teachers currently working in the K-12 education sector in Saskatchewan understand about the impact trauma plays on their students' behaviours and learning. As well, the research aimed to determine what professional development the teachers need to better support their students and whether professional development provided in an online or blended approach could support teacher practice and student support in the classroom.

This chapter provides a detailed review of the results collected from the various data sources used to complete the research. The data, which was collected from three sources; 1) A survey collected from respondents who originally volunteered to participate; 2) from the feedback within the online participant Moodle and, 3) From the culminating with an interview with each of the participants will be discussed and the finding will be presented.

Participant Group

Initially, 15 teachers expressed interest in participating in this study. Two participants did not complete the survey due to personal reasons, one participant withdrew from the study prior to beginning the Moodle course and one participant was unable to be reached for the final interview. This left 11 participants who completed the research study in its entirety.

Demographics

In the initial survey, participants were asked to report the grade they taught, their teaching role, their teaching location, and their years of experience. The results of these questions are presented in the figures below.

Figure 1

Participant Years of Teaching Experience
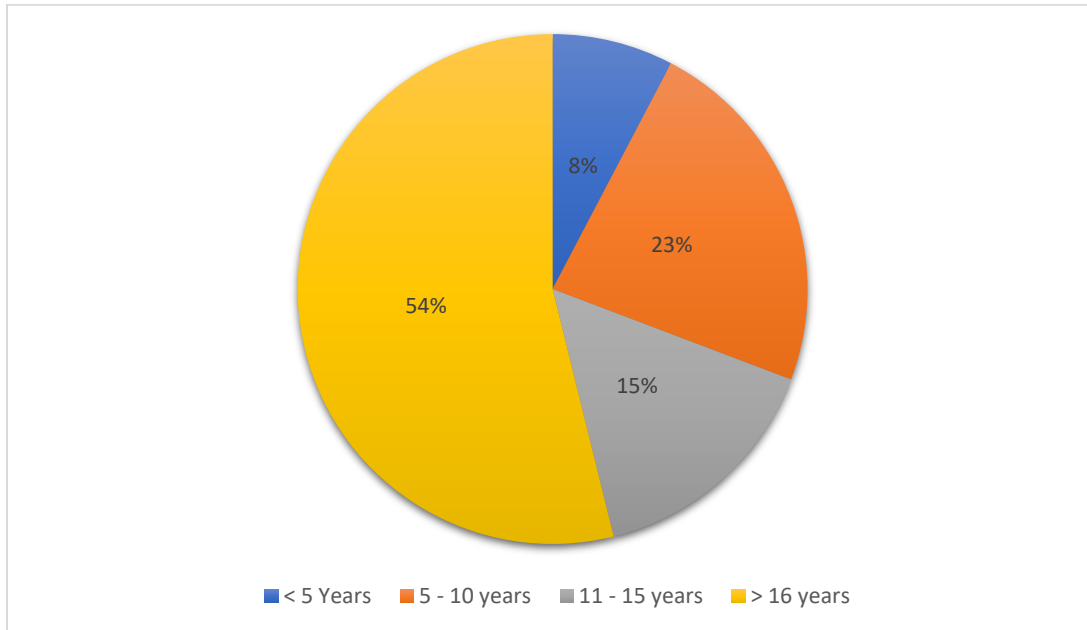
Note. Figure 1 above shows the participant's years of teaching experience. There were 13 teachers who completed the initial survey. One teacher had less than five years' teaching experience; three teachers were between five and ten years of experience; two teachers had between eleven and fifteen years of experience; and seven teachers had more than sixteen years of experience.

Participants were asked to identify whether they taught elementary, middle years, high school or a combination as their primary teaching load. Figure 2 below, illustrates the participants' responses. Three teachers taught in the elementary level, four teachers taught in the middle years level, four teachers taught in the high school level and two teachers had a combination of grade levels.

Figure 2

Participant Primary Teaching Level
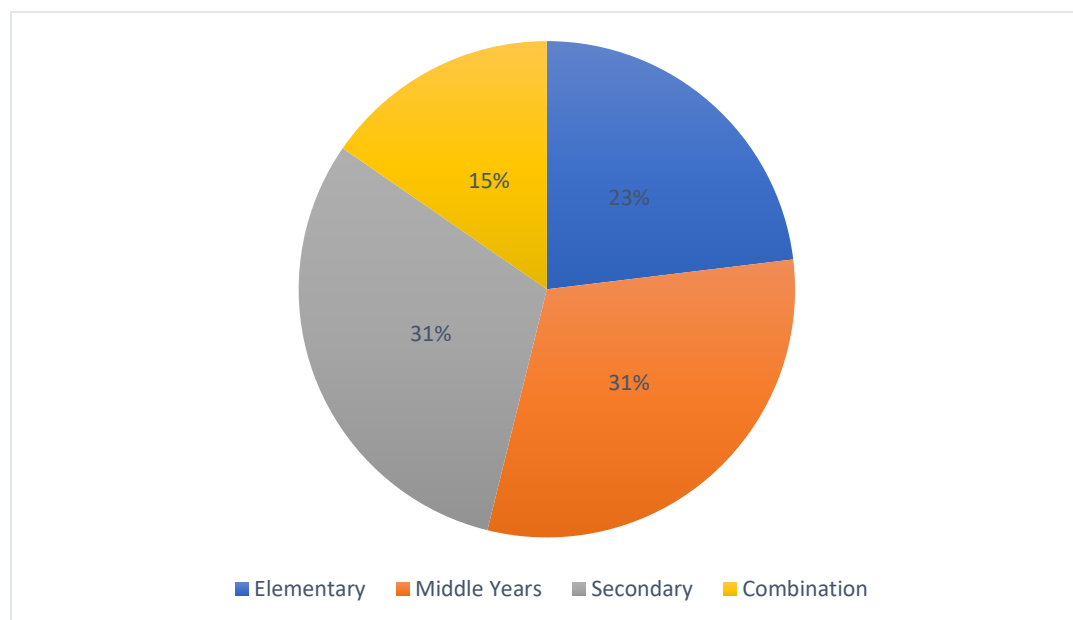
Figure 3

Teaching Responsibility
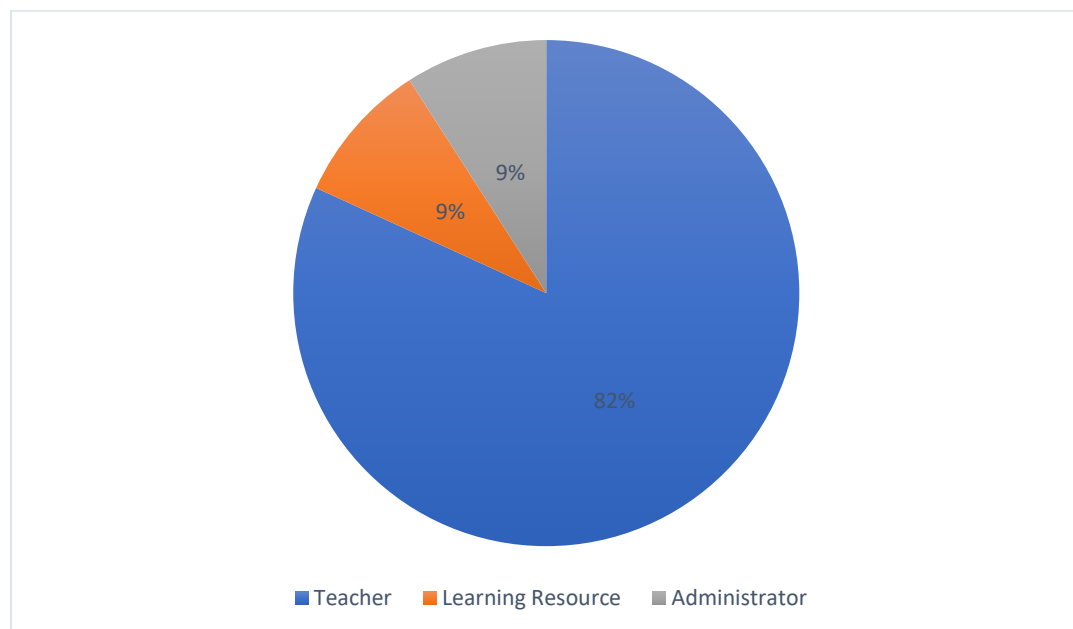
Note. In the initial survey, teacher-participants were asked about their primary teaching responsibility. Of the teachers surveyed, one teacher currently works as a Learning Resource Teacher, one teacher is currently an administrator and nine have indicated that are currently teaching, while two individuals skipped this question. It is important to note that one of the teachers surveyed has worked as an administrator. See Figure 3 above.

Figure 4

Teaching Locations
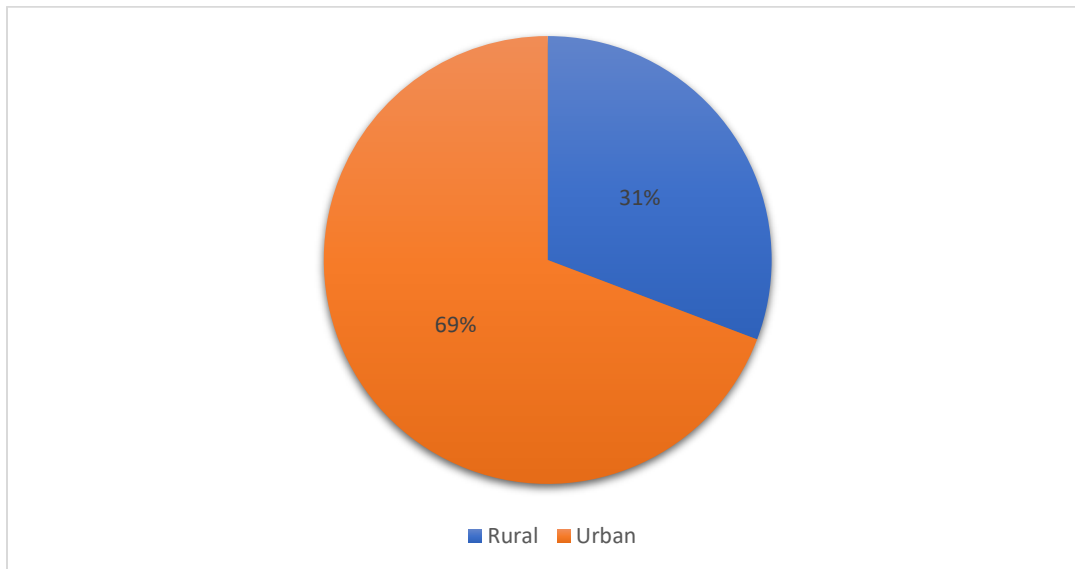
Note. A fourth demographic of the survey was to determine teaching locations as it asked the participants to identify if they were currently teaching in rural or urban Saskatchewan. Of the teachers surveyed, four were working in rural Saskatchewan and nine in urban centers. See Figure 4 above.

Survey Results for Research Question 1

To explore the first research question of this study which was, participants were invited to take part in a survey to help create an understanding of what teachers currently working in the field understood about the effects of trauma on their students. During the coding stage, codes

were identified that occurred most often in the surveys as illustrated in Table 1. "An integration

of inductive and deductive coding reflects a balanced, comprehensive view of the data" (Xu &

Zammit, 2020, p. 3).

Qualitative Feedback From Online Survey

Table 1 below outlines the coding and themes derived from the survey in relation to the

first research question: What do teachers understand about the effects of trauma? The discussion

below, details the coding findings. The themes reflected here are derived from the initial

responses of the participants during the survey. The participants described what they felt were

behaviours that were associated with trauma and that they witness in the classroom. These

responses were prior to participating in the online Moodle course about trauma.

Table 1

Coding Summary for Survey – Identifying Trauma Behaviours

Themes	Codes
Physical Behaviours	Withdrawn
	Acting out
	Self-harm
	Aggression
	Attention seeking
	Outbursts
	Lashing out
	Running away
	Unable to self-regulate
	Feeling sick
	Silent
	Quick to escalate
	Hide (hood up, earphones in, head down)
Emotional Behaviours	Nervous
	Withdrawn
	Sleepy/tired
	Crying
	Shy
	Attentions seeking
	Anxiety
	Craving attention
	Inappropriate language
Effects at School	Disengaged
	Absent
	Inability to focus
	Academic challenges
	Disconnected
	Shutting down
Executive Functioning	Academics affected
	Brain on survival
	Problem solving
	Memory
	Making connections

Note. The initial survey disclosed that the participants had some knowledge of how trauma affects students in their classrooms. The following information provides a summary of the participants' responses.

Physical Behaviours

Responses in the study showed that teacher-participants attributed students' physical reactions as one of the ways students respond to trauma. Aggressive behaviours such as slamming doors, throwing items, clenching fists, hurting, or intimidating others were responses teacher-participants in this study felt could be the behaviours of students who are experiencing trauma. Many participants also referenced the flight, fight or freeze reactions that can be associated with trauma as well as the inability to self-regulate. One participant shared their experience "kids have cursed at me, thrown items across the room, yelled at me, ran out of the room" (Participant Survey Response, 2022). In addition, an overwhelming response from participants was that students in trauma would show signs of withdrawal from their environment. Other physical behaviours provided by the participants were slouched bodies, holding breath, running away and being confrontational. Teacher-participants also suggested that students will experience headaches and stomach aches if they are experiencing trauma.

Emotional Behaviours

All the teachers who participated in this survey also referenced those students who experienced trauma would exhibit emotional behaviours. The behaviours that were suggested were signs of anxiety, nervousness or students craving attention. The use of inappropriate language could also be a sign of students who are experiencing trauma. While some teacher-participants referenced swearing, others used examples such as verbally lashing out, selective mutism, negative self-talk and refusing to talk. One participant responded that "I feel some kids wear their emotions on their sleeve and may show signs of trauma by being disengaged from class, having a hard time focusing, crying or even[having] outbursts" (Participant Survey

Response, 2022). Respondents also suggested that these students may be tired which could lead to their ability to effectively work in school.

Effects at School

While teacher-participants felt that physical behaviours and emotional behaviours can affect a student who is experiencing trauma, they also felt that students who were habitually late or had poor attendance may be dealing with trauma. Other behaviours suggested by the teacher-participants were that the students would refuse to participate, show disregard for others, withdraw from the class, disconnect with the work, not pay attention in class, have their head on the desk, sleep, and are unable to sit in one spot. While participants shared that students may have challenges with social skills and be unable to stay focussed a, one participant thought that students may "refuse to do work, [have] verbal outbursts, [place] head on their desk, [and be] unable to stay focused or get started with work (Participant Survey Response, 2022).

Executive Functioning

The fourth theme that arose from the qualitative survey data was that trauma can affect the brain's executive functioning. Participants suggested that the fight, flight and freeze response would be initiated. When asked how trauma affects executive functioning, one response was: "not sure- but I would guess that living in a constant state of trauma would mean that the brain functions only for survival" (Participant Survey Response, 2022). Responses also illustrated that participants felt that students in trauma may have difficulty with academic skills such as receiving information, problem solving, memory, and making connections. One participant stated, "students experiencing trauma demonstrate difficulty with executive functioning, which I think is why children with trauma are often treated for ADHD or other learning difficulties which is merely a symptom of trauma" (Participant Survey Response, 2022).

Survey Summary

The initial feedback from the participants suggests that the teachers who completed the survey understood trauma and how it affects students. Teacher-participants also agreed that students may have trouble retaining information, making connections with their schoolwork, or engaging with it. Many participants acknowledged that academic work would be affected if students were experiencing trauma. Overall, participants showed that they had a moderate understanding of the effects of trauma especially as it related to student behaviours.

Qualitative Feedback from the Moodle Discussion Forum

After the survey, teacher-participants were invited to take part in a short professional development, online Moodle course which was developed by the researcher. The course was divided into four sections. Section 1 highlighted the prevalence of trauma in Canada and Saskatchewan. Section 2 presented a brief overview of how trauma affects the various parts of the brain and how it can affect behaviours. Section 3 presented the participants with information on how trauma affects executive functioning. Section 4 provided some strategies to assist teachers but also asked the participants what they still need to know about trauma-informed teaching and learning. These sessions were delivered asynchronously which allowed participants to access them at times which were convenient for them. The professional development sessions collected data from participants' reflective responses to questions at the end of each section. It also allowed participants to converse with each other when they posted their responses in Moodle. This section provides an overview of each professional development section as well, it illustrates the reflective feedback participants contributed to the Moodle forums.

Moodle Section 1 – Prevalence of Trauma in Saskatchewan and Canada

The focus of this section was to provide the participants with statistics from the Government of Canada regarding maltreatment towards children and youth in Canada and specifically in Saskatchewan. The statistics provided showed that children/youth have been the victims of violence, sexual and emotional abuse, maltreatment, and neglect. At the conclusion of the information, participants were asked the following question: How might understanding more about trauma assist you in your classroom? Participants' responses highlighted the need to have more means of support to understand how to assist their students. Professional development opportunities and teacher training opportunities were discussed by participants in their question threads. Some participants focussed on the need to understand trauma because there are children/youth who do not disclose their abuse or maltreatment and who may not have some of the common signs of trauma. This created a new set of questions about how to find the means of support for these children/youth and what signs to look for with children/youth who do not have some of the common signs of trauma. One participant said, "being trauma-informed helps all students" (Participant Moodle Response, 2022).

Within the discussion threads in this section, participants disclosed that they need to have more teacher training to better recognize the signs of trauma. The participants shared that being trauma-informed would assist them in their daily practice and would help them to understand what means of support were needed for their students. As one participant wrote in the thread, "It is important as educators to know the common signs of trauma so that we can better adapt and accommodate students in our classroom. In general, taking a trauma-informed approach to our classroom practices will help all students" (Participant Moodle Response, 2022).

Moodle Section 2 – Effects of Trauma

This section of the professional development provided participants with information on how trauma affects the developing brain and the child/youth's stress response system. The purpose was to show participants how the three main areas of the brain, the hippocampus, cortex, and amygdala, are affected. They were also provided concrete examples of behaviours that children/youth could exhibit when that part of the brain is affected by trauma. As well, a short video was provided entitled – Adverse Childhood Experiences (2018). This video was used to illustrate the information provided and give further context in a visual form for the participants.

The participants were invited to participate in a question at the culmination of this section. The question posed asked the following: "You may have had experiences with students who have upset, scared, or even humiliated you. Think about your how your response might impact the child/youth if you are unaware of the context. What tools do you need to handle these adverse situations?" Most participants who participated in this question recalled times in their teaching careers where they did not respond well to behaviours in the classroom. Each spoke of gathering tools through their teaching career that is helping them now or leaning on other teachers for support. One participant concluded their response with the following statement, "I feel things are better, and I have better approaches to support and help students that have experienced trauma but still have a long way to go" (Participant Moodle Response, 2022).

All participants spoke of the tools that they have acquired and those that they still need or wish to acquire to assist students who are experiencing trauma. Creating positive spaces, welcoming environments, and building relationships were discussed in the responses. Each teacher-particpant articulated in various ways, that it was through their experiences over the course of their teaching career that has given them the tools to handle adverse situations

differently. One participant response articulates their growth, "throughout my career, I have

unfortunately had students that were going through trauma (and displayed characteristics that I

just thought were disrespectful) and unfortunately, I did not know what trauma was never mind

what tool to use" (Participant Moodle Response, 2022).

Moodle Section 3 – Effects of Trauma on Executive Functioning

This section of the professional development showed participants how trauma can

interfere with students' ability to learn because it interferes with the brain development.

Participants were provided information about Acute, Complex and Crossover Trauma and how it

affects the child/youth cognitively. Again, participants were provided a video, *How Trauma*

Affects the Brain (2013) that explained how trauma affects cognitive development. This video

was narrated by Laura Phillips, a clinical instructor with Family and Children's Resource

Program. The video focussed on how higher-level thinking can be less developed in

children/youth who have had disruptive brain development because of trauma. The video also

discussed language development and how children/youth who have been exposed to trauma

could have difficulty with the acquisition of language. Attachment was also discussed, and

participants were reminded of the importance of secure attachment as the foundation of all

development.

The participants were again asked to contribute to a discussion by answering the

following question: "Given what we have been looking at in terms of how trauma can impact

learning, do you feel that any of your students may have been experiencing trauma that could

have impacted their learning and how might this have been useful to know?" Many of the

respondents agreed that they had students who experienced learning difficulties which were

likely due to trauma. One teacher stated that they have many times wondered "what's preventing

this student from doing their best?" (Participant Moodle Response, 2022). There was also a general feeling of helplessness amongst the responses as teacher-participants spoke about needing support. "When I consider [what] all these students are going through, or have gone through and are processing, I find myself getting disheartened. How can I possibly teach these children?" (Participant Moodle Response, 2022).

Some participants also questioned their own ability to understand the differences between learning difficulties due to trauma and those that are diagnosed with learning disabilities. One participant added, "I would like to know more about how to understand when a student is struggling with their executive functioning due to trauma, or just feeling defiant, bored, etc." (Participant Moodle Response, 2022). All participants reported understanding that cognitive functioning can be affected by trauma and most reported that they require the appropriate means of support for their students, and many were unsure what those means of support might be as they too need guidance with this.

Moodle Section 4 – Strategies to Help Our Students

The final section provided participants with various strategies from Alexander's (2019) book, *Building Trauma-Sensitive Schools*. As well, references to other resource such as books, journals and webinars were provided for the participants. The final question posed was: "As you think about your classroom, your students or the ones who are no longer in your class, what resources or tools do you think would be beneficial for you? How would professional development opportunities assist you and your school?" Participant responses suggested that there is a need for them to have more tools to facilitate the teaching of self-regulation and student arousal zones. One participant felt there would be a benefit to having professional development specifically on intergenerational trauma and how to assist students who are experiencing this.

Participant responses indicated that they felt all teachers should have some form of trauma-based training. While one teacher-participant commented that mandatory professional development might not be the proper approach as there are teachers who will not 'buy in' to this and would be dismissive of the approach, others echoed this sentiment in their final interview which will be discussed later in this chapter. It was also suggested in both the Moodle platform and echoed several times in the interviews that pre-service teachers also need to be taking trauma-informed classroom practices, so that they may be better prepared for the realities of the classroom.

Two participants indicated that professional development in trauma-informed education was "seriously lacking" and is "overlooked". One participant explained that this happens because it is "hard, messy and we cannot measure it" (Participant Moodle Response. 2022). Each of the two participants indicated that schools are focussed on what can be measured, like graduation rates and closing the achievement gap; however as one participant stated, "we aren't dealing with social emotional learning and not focussing on the trauma in their [students'] lives."

Qualitative Feedback From the Final Interview With Participants

Participants of this study were asked to take part in a final interview over Teams, Zoom, the telephone or if available, to meet in person. There were two phone calls, one in person meeting and the remainder of the participants were interviewed either on the Teams' platform or by Zoom conferencing. The interview format consisted of seven questions; however, other questions evolved with some participants. The following sections will provide a summary of the conversations.

Interview Question 1

Given what you have learned about trauma-informed learning, what are areas you feel you still require attention in terms of professional development?

Table 2

Participant Responses for Question 1

Participant	Response
1.	Need professional development PD on self-regulation
2.	Need more training Learn to understand triggers Learn how to provide safe spaces Resources for students Learn more about Indigenous ways of knowing – How do I support them and honour their way of knowing?
3.	Reassurance the people above us understands the importance of making the child whole, safe and heard. Trauma-informed approach needs to be understood division wide. This support needs to occur as soon as they enter school Curriculums need to have a trauma-informed understanding to them.
4.	PD in general – we need to do a better job of understanding what trauma means. We need to reduce the stigma and emphasize the importance of mental health. We need to understand how to help students with unresolved trauma.
5.	Absolutely, we are lacking in this area. We are only giving it 'lip service'. It is hard to focus on because it is messy, and we can't measure it. Need to address the societal issues that are continually marginalizing and oppressing our students. Need to deal with the social emotion learning and focus on the trauma in students' lives. The TRC (Truth and Reconciliation Commission) is not lived out in our schools. We need a support system that surrounds these children.
6.	There is so much development in ACEs – we need learn how to use that and how to help students who score high. We need to learn how to take a culturally responsive approach to this. I have done some research and am using an Indigenous approach. E.g. have an Elder in Residence.
7.	Need PD to learn how to recognize trauma. What are the underlying signs? We need PD to help students who are experiencing trauma.
8.	Information is needed on intergenerational trauma and how it relates to students and families. How can we be more honouring of the students and their families?

	Understanding about trauma triggers. Learning how to adapt practices to support trauma and trauma triggers. Is Orange Shirt Day a trigger? What about the MMIW (murdered and missing Indigenous Women)?
9.	How do identify students who are experiencing trauma and then what are our next steps? How to create a team approach so that we know how the students are doing.
10.	PD would help to learn what we need to look for. Learn how to understand triggers. School approach of creating a community of care. PD on de-escalation skills.
11.	How do we build connections with kids who don't want to make connections? What to do next when we feel that they are in trauma?

Note. While many of the participants indicated that they were actively engaging in some of the strategies of a trauma-informed classroom, there were many areas that they felt they still needed support. Each participant recognized that more training would be beneficial to help them understand behaviours and learning concerns their students face It was evident that the participants had some understanding of how trauma affects students' behaviours and cognitive development, it was evident that as they reflected through the process, there are gaps that they still need to have addressed after completing the Moodle course. Table 2 indicates responses from the participants which show their individual learning needs and questions that remain regarding trauma-informed education.

Interview Question 2

Looking through the lens of a trauma-informed educator, what beliefs do you have about children/youth's behaviours in school? Have they changed since being involved in this study?

Table 3

Participant Responses for Question 2

Participant	Anecdotal Responses
1.	Not changed in this study but have changed since being at the school. I see more trauma. Reflecting back, I feel I have missed things along the way and would have done things differently.
2.	Not enough attention has been given in the past – seems to have a 'suck it up' attitude. I have evolved – people were hurting before and buried it. I am growing and understanding a lot more and am trying to listen and learn.
3.	Currently works in a trauma centered environment. Beliefs have changed over the years. The students are hurting and don't know how to let their hurt out.
4.	Trauma is a big reason I went into teaching. It defines my pedagogy. Give PD to teachers so that they understand. Teachers are often quick to judge the behaviour. Teachers who don't understand how trauma affects a child can have trouble. This study is important for teachers.
5.	Beliefs have changed over the years. This is something that is missing in education – 'we seem to have become a profession desensitized to looking at change and evolving.' The information was a good refresher.
6.	Going through the Moodle course gave me reminders about how much trauma impacts students and how much still needs to be done. We get caught up in literacy and numeracy skill improvement, but we need to look through a trauma-informed lens. Teachers burn out because of the behaviours and learning behaviours – if teachers have trauma-informed education, they will benefit. If we take a trauma-informed approach, we will be more proactive in helping our students.
7.	Yes, when I first started teaching and especially during internship, I assumed the student was having a bad day.
8.	Yes, especially in my first teaching year. I feel like I was a terrible teacher when students were acting out. Found out at the end of the year the one student who was acting out had parents who were separating, moving to another school and the teacher was the outlet for the aggression. Need to continue to find ways to connect with students.
9.	Yes, and I did not always handle things well, but I am getting more tools. Looking back, I imagine that the experiences were trauma related. Have taken Violent Risk Assessment Training.

10.	Yes, especially in the beginning years when my ego was pretty big and my inability to help them to de-escalate.
	I am sure there are some little things I did not see.
	Can be hard to discern what is trauma and what is not. There are students who want to hide and retreat.
	Through self-discovery, there is a better understanding of the impact of trauma. We are often hesitant to admit as teachers that what we are doing is not working and we need to confront that. We need to admit that our previous practices were harming students.
11.	Background before teaching was in mental health so my earlier career has helped me to see this.
	Made assumptions that the behaviours were attributed to mental health but can see know they are very likely related to trauma.

Note. The participants' responses for question 2 indicated that teachers have accumulated some tools during their teaching careers to assist them with behaviours they face in the classroom. Interestingly, many of the participants claimed to have made errors, mishandled situations and made assumptions about students in the past. One participant response indicated that "teachers get frustrated about the behaviours of the child – this perspective (trauma-informed) helps us in our interactions" (Participant Interview Response, 2022). While the participants in this study have shared that they are continuously working to find tools to meet their students' needs, they also have indicated that there is more to learn to fully assist students in school. One participant stated that going through the Moodle gave her a reminder about how trauma does impact children and stated that it "needs to be at the forefront" (Participant Interview Response, 2022) of what they are doing. A second participant stated that they felt "more prepared to go into the classroom. If someone is acting out, or not being themselves, I am a little more aware and prepared" (Participant Interview Response, 2022). This same participant also shared that they feel that the Moodle course was helpful but there needs to be more so that they can "continue to grow" (Participant Interview Response, 2022).

Interview Question 3

Have you ever experienced a reaction or an altercation with a student you now believe may have

been trauma related? Can you describe your reaction?

Table 4

Participant Responses for Question 3

Participant	Response	Anecdotal Responses
1.	Yes	Reflecting back on a child who would get upset because of the no cell phone, no listening to music in school policy. The student would make fists, shake them at her. Reflecting back, this could be a trauma response.
2.	Yes	It is important to reflect on the past and think back and ask yourself questions. Did I invest enough time in that kid? Did I ignore the signs? Could I have dug deeper or listened more? Should I have taken a timeout myself to not escalate?
3.	Yes	Most of my students are dealing with trauma. Desks thrown, been pushed into a coke machine, even hit.
4.	Yes	A child was struggling. Others felt a suspension was necessary. As trauma defines my pedagogy, my response was to ensure the child felt safe, cared for and work on building the relationship.
5.	Yes	Lots of them.
6.	Yes	Had a transient student who left, came back. This student was withdrawn. As I look back and reflect on the information on their IIP, maybe different strategies were needed. Disruptive students. I wanted to look like I could control the class. The focus was on classroom management and not sure it was a trauma-informed approach.
7.	Yes	When I was first teaching. I assumed the child was just having a bad day. I moved them aside and spoke with them in the hallway.
8.	Yes	First year teaching – felt I was a terrible teacher to the kids. Students would act out. Found out later about circumstances. Realized that I need to find ways to connect with students.
9.	Yes	I did not always handle things well, but now I have more tools. I imagine that some of my past students were experiencing trauma. The Violent Threat Risk Assessment training also helped.
10.	Yes	Background is in Mental Health – previous career. Young man who threw a desk. Made assumption about mental health but it could also have been a trauma response to the situation.
11.	Yes	Especially at the beginning of my career. My ego was pretty big. Student was yelling obscenities. Tried to retain a good relationship with the student – with boundaries.

> There were students who wanted to hide, retreat into their hoods –
> this was difficult to discern what was going on – now as I work
> more with students, I can see this was probably trauma.

Note. In response to question 3, all participants shared that they had previous altercations or

interactions with past students that could have been a trauma response. Three teacher-

participants indicated that either in their first year of teaching or early in their career, they made

assumptions about the behaviours and upon reflection, their perceptions about the behaviours

have changed. Teacher-participants also indicated through their responses that tools that they

have gained over the years as well as their years of teaching experience, have helped them to

better understand why students may react. While all participants reflected on their past

experiences, one teacher-participant shared the importance of self-reflection and reflected on

themselves. "Could I have dug deeper or listened more? Should I have taken a time-out

myself?". The responses from all of the teacher-participants indicated that they have taught

students who they believe had been experiencing trauma.

Interview Question 4

Can you determine if a student's behaviour was triggered by trauma, or their learning impacted?

Table 5

Participant Responses for Question 4

Participant	Responses	Anecdotal Responses
1.	Possibly	I have enough information to suspect, but I don't want to assume.
2.	Possibly	I am getting better at it. Learning seems so black and white. Sometimes with their learning, they don't feel smart enough; they go to that flight or freeze. You can tell they have capacity, but their record of adaptions and their cumulative files don't match up!
3.	Yes	Most of our children are dealing with trauma.
4.	Yes	Because I am studying it. My gut reaction in now the thought of trauma.
5.	Yes	This is improving with time and attention to trauma.
6.	Yes	There are signs. Students are overactive, distracting, withdrawn… Over the years I am getting better at it but teachers need to learn the signs. Not everyone understands.
7.	No	I often think it is just an off day. Maybe if I knew the child's background it would be easier. If I knew more of the steps of treating trauma or having a trauma-informed approach, I would know more. I did not know the cognitive part of the brain that can be affected because of trauma.
8.	No	I am wary of this. I could be doing something that is triggering. Learning – no as well. When we have discussions about IEP's, we need to start thinking about whether trauma is impacting this.
9.	Possibly	Children don't just have outburst for no reason – something must be happening.
10.	No	I can possibly tell more regarding the behaviours.
11.	Yes	Even with their learning, I have seen many students just in survival mode

Note. In response to the question, participants' answers varied. It is important to note that all the teacher-participants who responded yes to this question have been working at schools where trauma is evident. One of the participants who also felt they could determine if the behaviour or learning was impacted by trauma is a trauma survivor as well and shared her trauma history. She disclosed that her story helped her to understand trauma and address it in the classroom.

The remainder of the participants were either unsure if they could determine if a student's

behaviour or felt that they still did not have enough information to determine if behaviours

displayed were due to trauma. While some participants felt that they are getting better at

identifying trauma, many responses clarified that there was still uncertainty, and more

information would be beneficial.

Interview Question 5

Has the information provided shed any light into how you feel you will react to student

behaviour in the future or to student learning?

Table 6

Participant Responses for Question 5

Participant		Anecdotal Responses
1.	Yes	I found it fascinating with the learning side of the study. Moodle brought to light that it is not that the students aren't trying, there are other things going on. I need to break things into pieces. I need them adapt to find ways to help them be successful.
2.	Yes	The questions, this conversation has been helpful. It seems that in the past it was taboo to talk about trauma. This helps me to think about some of my kids in school.
3.	Information is not new	This has been a reminder of this topic and how trauma affects students- this needs to be at the forefront of our work.
4.	Yes	I did not know the statistics. What I knew from trauma was my own lived experience. Teachers are numbers people, and it is good for them to see the stats to make it sink in.
5.	Yes	Learned some new information and will think about where it will fit in with own situation/class.
6.	Yes	The reminders ae useful. Be gentle with students. Good reminder of how to react in the moment. Found it interesting to look at what triggers me. Some colleagues raise voices, and I am thinking how that triggers students.
7.	Yes	I aim to be more sensitive about what is going on the class, gym, halls. I feel a bit more secure about understanding trauma and will start to think more about behaviours and learning being impacted by trauma.

8.	Yes	Understanding about attachment and the effect of the primary caregiver has on attachment was interesting and wants to research more about this. Did reading Great Bear where one of the characters has braids cut off – Does this contribute to trauma? Will worry if students are being diagnosed or labeled with a learning disability if in fact it is actually trauma. Will be thinking about the behaviours and wondering if they are trauma responses.
9.	No and Yes	No – I am immersed in trauma at my school. Yes – because of the further understanding. Knowing is more. It has made me take a step back and know there could be underlying reasons for outbursts.
10.	Not necessarily	Reminders are necessary. We often learn something and then set it aside. Appreciated the facilitation and other people's experiences. The forum provided an opportunity for practical experiences.
11.	No	Material is not new to me. I have had opportunities to learn. This information would be useful to others who do not have the opportunities.

Note. Interview question 5 asked participants if the information provided would change the way they interacted or responded with students. While most respondents indicated that they would alter their practice, the respondents who said no added a disclaimer that due to the fact that they are immersed in a trauma environment in their school, the practices they currently are using are trauma-informed practices. Participants who responded that they would use the information to alter their practice disclosed that they would be looking at both students' behaviours and their learning through a trauma lens.

Interview Question 6

Do you feel that your teaching practice will change given the information received through this study?

Table 7

Participant Responses for Question 6

Participant	Responses
1.	Yes. I was doing some trauma-informed practices, but I can work on being more consistent
2.	A study like this helps out an entire school system. These questions in general, every teacher should look at. Teachers need to feel supported by other teachers. We need to educate about trauma. At the beginning of the school year- plant the mindset of what happened to you not what is wrong with you.
3.	We will continue to grow as a school, l and I will continue to look for PD and books in this area. We learn more through our interactions and the way we handle those interactions – keep reflecting as it is important.
4.	It will continue to grow and evolve. Trauma is at the forefront of my thinking.
5.	I am on a lifetime journey of acceptance, growth, reflection … repeat. I will work hard to not allow trauma to undermine relationships.
6.	Once you learn something, you know better. Create conversations with colleagues who may have differing opinions and beliefs about how a child behaves. When I go into meetings, this information will be at the back of my mind and will be thinking how we can make trauma-informed decisions.
7.	I will continue to work to think about behaviours and learning as trauma, and I will work to not make assumptions about the behaviours.
8.	Yes, I want to incorporate morning meeting, adapt and alter lessons to avoid unnecessary arousal of students. I had some knowledge of some of the things in this study, but I want to make more of an effort for better implementation.
9.	Yes, even just these reminders were helpful. Knowing that there is most likely more to the story of why the student is acting out, shutting down. Be more empathetic.
10.	This is an ongoing process. We have an obligation to keep learning.
11.	Not really. I have a trauma-informed approach.

Note. Interview question 6 asked the participants if they would change their practices given the

information that was provided in the Moodle. Of the eleven respondents, ten said that they are

making some changes to their practice. The participants in this study explained their commitment

to their own PD and growth as educators. One participant stated that "a study like this helps our

entire school system" and that "we need to educate about trauma." This participant went on to

add "teachers don't like to see kids struggle so let's figure out ways to see the kids succeed and

how to heal." Another participant spoke about having conversations with colleagues who may

feel differently about the reasons for the behaviours that the student is displaying and remind

them that the student may be experiencing trauma. "We will go a lot further in helping our

students if we are all trauma-informed."

Interview Question 7

Would online or blended learning be helpful be useful to provide professional development for

teachers?

Table 8

Participant Responses for Question 7

Participant	Response
1.	The different sections in Moodle were informative as it dealt with the background but not necessarily enough to suffice on its own. I like to see modelling. The background information can be done in webinars.
2.	Technology provides a great opportunity for teachers to grow. It is an opportunity for teachers as they have busy lives, and they can get the PD when they need it. PD is something that is needed for all teachers.
3.	I like having the person in the room. The worry about blended is if teachers are given more to read- they may not read it. Maybe if it was embedded in after school meeting or in school PD and done as a group. Trauma-informed learning is one of the areas this school has been requesting information from their division.
4.	It might be the best approach. Allows for individuals to work on their own.
5.	Blended PD should be used for every form of PD because of the options, availability, and opportunities. We cannot always drop everything and go to PD. We are limited by what the people who organize want us to know. People with positions of influence drives the next bandwagon.
6.	Yes, we need to provide opportunities for PD. It is important for all teachers to have PD. It would be nice for our pre-service teachers to be taught this in university.
7.	Yes, it gives busy teachers to find the time to take PD. Travelling can be difficult. Online PD allows teachers to take the course work in increments.

	It is important all teachers should have this, and it should be taught in university.
8.	Yes, the Moodle was set up as a great way for teachers who are just learning. Teachers were able to hop into the class and discuss as much or as little as we like. Online provides opportunity to jump in as we like. Having virtual PD like this may not hit the PD fund as much. Blended learning may help to dig a bit deeper into the topic. PD buy in by some teachers can be difficult. There are teachers who do not want to do PD yet there are teachers who need this.
9.	Yes, this would be beneficial to teachers who are unaware of what trauma does. It is important for them to get an understanding, so they react to behaviours appropriately.
10.	If trauma-informed is fundamentally about connections, then blended and online opportunities are not the same experience as immediate feedback and conversation flow. As much as we need to be told what to do, we need to have the time to think about it and collaborate. Having PD in person could be the best option. Some areas could be online.
11.	Yes. I enjoyed the role playing in the ASIST training- you could walk through it and be brave about it. I would like to see more of this. It would be nice to have training on how to have difficult conversations with students. (ASIST – Applied Suicide Intervention Skills Training)

Note. The final question asked of the participants was to determine if an online or blended

delivery would be beneficial to provide teachers with professional development in trauma-

informed education. While all participants agreed that there are areas that could be delivered

virtually through Moodles or webinars, there were participants who felt that in person sessions

would be of more benefit:

> If trauma-informed is fundamentally about connections, then blended and online
>
> opportunities are not the same experience as immediate feedback and conversation flow.
>
> As much as we need to be told what to do, we need to have the time to think about it and
>
> collaborate (Participant Interview Response, 2022).

This was echoed by a second participant who liked having the live experience of a person

delivering the content. This participant also disclosed their worry about engagement of

participants if they are left to do it on their own.

Of the eleven participants, seven participants preferred to have the virtual PD for various

reasons. Reasons included: the availability to access on their time; the ability to drop in and out

of the PD; virtual PD doesn't affect their PD funds at the school/division; they live in rural

Saskatchewan, and it is not easy to get to in person courses; and the ability to determine their

own PD is important. Two participants also spoke about having both online and in person

sessions as it provided the ability to learn first and then engage in person with the expert.

Table 9

Coding Summary for Moodle and Interview

Themes	Codes
Professional Development	Create safe environment
	Safety needs
	Education
	Trauma training
	Means of support
	Indicators
	Trauma-informed classrooms
	Understand students' needs
	Create safe places
	Handle situations
	Change attitudes about behaviour and learning
	Teaching/modeling
	Toolbox of resources
	Self-awareness
	Be reflective
	Triggers
	Arousal zones
	Daily practices
	Cultural awareness
	Intergenerational trauma
Supports for Students	Safe space

	Safety needs
	Proper training
	Resources
	Provide vocabulary
	Self-regulation
	Welcoming environment
	Journalling
	Cultural awareness
	Personnel
	Daily interactions
	Adult champions
Understanding the Impact of Trauma	Abuse
	Neglect
	Learning impacted
	Trust concerns
	Do not report abuse
	Verbal outbursts
	Physical outbursts
	Bullying
	Isolation
	Easily triggered
	Disrespectful
Priorities	Support for students
	Intergenerational trauma
	Teacher education
	Trauma-informed schools
	Trauma-informed divisions

Note. The information gathered from the participants in the Moodle and the subsequent one on one interview highlighted the four themes illustrated in Table 8. The following information discusses these results.

Professional Development

The coded information in Table 9 highlights the areas teacher-participants indicated in terms of their professional development needs. From the discussions participants engaged in during the Moodle and through their responses to the interview questions, the theme of professional development in trauma-informed teaching and learning was amplified by all participants. Participants highlighted the need for support to ensure students who were impacted

by trauma received instruction from all educators using a trauma lens. One respondent stated in the Moodle that "it is important as educators to know the common signs of trauma so we can better adapt and accommodate students in our classroom. In general, taking a trauma-informed approach to our classroom will help all students" (Participant Interview Response, 2022). Participants also shared that more attention to how trauma impacts learners needed to be at the forefront of the classroom, school, and division approaches.

Student Support

Participants shared their concern for ensuring that student support was available for students who are experiencing or have experienced trauma. While there is overlap between the need for student support and teacher training, the need for creating safe environments, having resources and tools for assisting students in trauma was indicated by teacher-participants. The participants indicated that improving student support would be beneficial to meet the needs of their students and improve student outcomes. "Students without a support system are making incremental improvements. We aren't dealing with social emotional learning. We are not focusing on the societal issues that are continually marginalizing and oppressing" (Participant Interview, 2022).

Understanding the Impact of Trauma

While participants illustrated in their initial survey that they had an understanding of the impact that trauma has on students' behaviours and on learning, new information and a deeper understanding was indicated by several of the participants. Some shared how their perspectives about behaviour and learning had changed. "We can become frustrated when a student refuses to do a task and it becomes a power struggle. I think when we are unaware of the context, it is difficult to take a deep-rooted look at the reason a student is behaving the way they do"

(Participant Moodle Response, 2022). "It is useful to know that the effects of trauma are not a result of students being 'bored' or 'forgetful', and it changes the narrative (Participant Moodle Response, 2022). While participants shared that information in the Moodle helped them to understand or rekindle their understanding, there were areas that prompted questions and concerns. While one participant stated that they wanted to learn more about attachment and the effects on executive functioning, others wondered about triggers that could be inadvertently impacting their students such as Orange Shirt Day, holidays, or anniversaries of significance to the students those teachers are unaware of. "I did not truly appreciate the impact it [trauma] had on learning. We sometimes assume there is something else going on" (Participant Interview Response, 2022).

Priorities

Participants in this study indicated that there is a need to be better informed in terms of trauma-informed teaching and learning. While some teacher-participants indicated that they have taken initiatives themselves to understand trauma and its impact, four participants, two of which are in the same division, stated that they have had some division or school training on trauma-informed practiced. However as one respondent states, "with everything in education, there are people who 'buy in' and those who don't. There will always be the typical strict, no BS, old schoolteacher and it can be difficult to open a dialogue without them dismissing it" (Participant Moodle Response, 2022). While all the participants indicated that there needs to be professional development for teachers, three indicated that this is also a responsibility for divisions as well to understand the impact of trauma and the importance of creating trauma-informed schools and divisions. One respondent stated:

> There is so much pressure to get them in the pretty dress – but we need the healing for our
>
> students. We are expected to focus on what can be measured, but we can't get the measured
>
> data without healing first. PD in this area needs to be heard not just by the teacher but the
>
> greater picture- our boards, our divisions. (Participant Interview Response, 2022)

Four teacher-participants also felt that there was a need for pre-service teachers to be provided

in their teacher education programs. Three participants indicated that there is a need to

implement trauma-informed practices that specifically embed information and practices to

support the intergenerational trauma that students experience. "The TRC (Truth and

Reconciliation Commission) is not being lived out in our schools" (Participant Interview

Response, 2022). The data derived from the research-participants indicates that there is a need

for trauma-informed professional development.

Summarized Findings

Table 10 below outlines the key findings from this study in relation to the research

questions.

Table 10

Summarized Findings

Question	Summarized Findings
RQ1. What do teachers understand about the effects of trauma on student learning?	Physical behaviours Inappropriate language Effects at school Executive functioning
RQ2. What professional development support is needed to support educators?	Professional development Self-regulation Understanding trauma Underlying signs of trauma What are triggers? Intergenerational trauma Trauma-informed education
RQ3. How could online, blended and distant education, play a role in helping teachers support students with trauma?	Professional development for school stakeholders Technology opportunities Online – cost effective Time effective

What do Teachers Understand About the Effects of Trauma on Student Learning?

As discussed in the initial survey results, participants had a good understanding of student behaviours associated with trauma. They concluded that students showed signs of physically acting out, had emotional responses that were out of the ordinary as well as displayed problems academically which related to their cognitive functioning. Upon completion of the short Moodle professional development that they participated in, nine of eleven participants stated that they had a better understanding of trauma and how it affects their behaviour and student learning. The area that teacher-participants felt they learned the most after taking part in the PD was having a clearer understanding of how trauma impacts the brain's ability to cognitively function.

In both the Moodle and the interview, participants were asked to reflect on their teaching experiences with student learning and behaviours and ask themselves upon reflection, if those

behaviours could have been impacted by trauma. Each participant acknowledged that there have been past experiences where the student's learning or their behaviour may have been impacted by trauma. Participant reflections indicated that they questioned some of their past reflections and asked themselves questions such as: Did I ignore the signs? Could I have dug deeper? Is teacher burn-out happening because we aren't informed about trauma?

While most of the teachers in this study had some knowledge of the effects of trauma on student learning, there was inferred by several that there are teachers that could benefit from this PD. One participant stated that "teachers who do not use or understand trauma will have difficulties in the classroom" (Participant Interview Response, 2022). All participants suggested that professional development in this area is vital for the teacher as well as for the impact that it will have on students at school.

When asking the teacher-participants if they could determine if a student's behaviour was triggered by trauma, five of the participants said yes. Whereas when discussing if they can determine if learning is impacted, this was not as clearly defined by the participants. In fact, one respondent stated. "I did not know the cognitive part of the brain can be affected because of trauma" (Participant Interview Response, 2022). This would indicate the need for further awareness and education in trauma-informed teaching and learning.

What Professional Development Support is Needed to Support Educators?

Through the Moodle and the interview, participants stated that there is a need for further professional development not only for themselves, but for all stakeholders in education. One participant stated in the Moodle forum that "being trauma-informed helps all students." "I would argue every student has gone through trauma with the pandemic. It is more important than ever

that teachers, administrators, and divisions are trauma-informed" (Participant Moodle Response, 2022).

Four participants indicated that there is a need to educate teachers about intergenerational trauma, its impact, and ways to address this in the classroom. These teacher-participants also indicated that in thinking about how triggers can affect a students' behaviour or learning. Questions also arose around wanting to understand if Orange Shirt Days, or discussions about Residential Schools could trigger responses for their students and if so, what is the most supportive and culturally sensitive manner to address this?

How Could Online, Distance, or Blended Education Play a Role in Helping Teachers Support Students With Trauma?

All participants indicated that some form of online, blended, or distant professional learning would be beneficial for teachers. For nine of the participants surveyed, they felt that using technology to deliver professional development was beneficial for several reasons. Due to the large geographical region and ability to access professional development in some areas of Saskatchewan, an online option would be fiscally responsible. Teacher-participants who were proponents of the online PD, felt that this mode would allow them easier access to it, would eliminate barriers like travel costs, would limit costs to their person PD funds and allow them to participate at times that fit into their work/life schedules.

While some participants were proponents of an online delivery of professional development, three participants indicated that they would like to see some in person training as well. One participant stated: "if trauma-informed is fundamentally about connections, then blended and online opportunities are not the same experience as immediate feedback and conversation flow" (Participant Interview Response, 2022). Another participant worried about

teacher 'buy in' to the PD and the third indicated their preference for having a person in the room to ask questions and to get feedback. However, all participants responded that professional development in the area of trauma-informed learning and teaching was important for educators.

Chapter Summary

The findings in this study suggest that there is a need and a desire to have professional development opportunities for teachers in Saskatchewan related to trauma-informed learning and teaching. Participant feedback in the online Moodle and the one-on-one interviews indicated that teachers are still learning about trauma or need to learn more about it. The study also revealed that some of the participants were somewhat unaware of the prevalence of trauma on the children/youth in Saskatchewan. There was also a desire amongst the participants to have the tools and resources needed to assist them in supporting their students, which could be achieved through professional development. Through the analysis of the participants' reflective feedback, four themes emerged: (1) teacher training, (2) support for students, (3) understanding the impact of trauma, and (4) priorities. The findings from the research are discussed in the following chapter.

Chapter 5: Analysis and Discussion

Introduction

The purpose of this study was to explore how teacher-participants in Saskatchewan perceived their understanding about trauma and its impact on student learning and behaviours and to determine what professional development means of support are needed. In this chapter, an analysis and discussion of the results will be presented. The significance of the research in the immediate context is also examined and conclusions are drawn from the analysis of the themes which developed.

Specifically, the purpose of this study was to explore the following research questions:

1. What do teachers understand about the effects of trauma on student learning?

2. What professional development means of support are needed to support educators?

3. How could online, blended, and distant learning play a role in helping teachers support students with trauma?

In this chapter, I also illustrate how the participants' response from the three data collections used align with the literature discussed in chapter two. As well, potential implications and recommendations for actions are explored. Finally, I will discuss the limitations of these findings.

Summary of Research

This study used a practitioner action research methodology. Using qualitative data derived from participant responses, the study identified what teacher-participants in Saskatchewan understood about the prevalence of trauma for students in the province, what these teachers knew about trauma-informed teaching and learning and determined if online professional development support could assist their understanding. According to the research of

Campbell (2013), practitioner research has the potential to increase confidence amongst the

participants. This idea was displayed in participants' reflection of their own practice upon

completion of this study. Participants shared in their interviews that trauma will be at the

forefront of their thoughts, and they will work to put into practice what they already knew and

what they have learned. As the theoretical framework of this study was guided by the principles

of social constructivism, participants were provided the opportunity to collaborate and engage

with one another in the Moodle forum. This provided the participants with the opportunity to not

only ask questions, but to respond to each other, if they felt comfortable. According to Barak and

Green (2021), collaboration promotes useful knowledge through social interaction. This practice

was evident in both the Moodle forums which encouraged participants to engage with each other,

and during the interview where participants engaged with the researcher. Through the interview

process, participants shared their new understandings, their thoughts for professional

development and their perspectives of what next steps could entail.

Interpretation of the Findings

The research findings were derived from three data sources. Qualitative data from the

initial survey, the reflective comments from the Moodle questions and the final interview were

coded and themes were obtained. Analysis of the data resulted in the identification of four

themes. These four themes included: 1) professional development, 2) support for students, 3)

understanding the impact of trauma, and 4) priorities. Each will be described in detail in the

following sections and analyzed in correlation to the literature.

Professional Development

The findings of this study indicate that additional professional development is needed to

support teachers in their effort to implement trauma-informed teaching practices as is discussed

in the literature review (Cook & Newman, 2019; Paiva, 2019; Siegal, 2019). Teacher-

participants reflected on their needs within their respective classrooms, schools, and division.

Each participant concluded that there needs to be more awareness and support for students

experiencing trauma. While some participants disclosed that they were unaware of the severity of

trauma facing Saskatchewan students, others indicated that though not surprised by the facts, this

information is vital information for their schools and communities to have in order to fully

support students experiencing trauma. Participants also echoed Anderson et al. (2015)'s

sentiment that without proper professional development, they are not able to address the issues

facing their students.

The literature ascertains that not enough attention is given to trauma-informed

professional development for teachers (Anderson et al., 2015; Dorodo et al., 2016; Kunst et al.,

2018; Walkley & Cox, 2013). Through the interviews in this study, several teacher-participants

explained that division priorities were on areas that could be measured and wanted to have a

reassurance that those in leadership positions who make decisions that impact schools and

students fully understood what children/youth were going through. Walkey and Cox (2013)

suggest that an important part of creating trauma-informed schools is to have a commitment from

the leaders. While discussing whether professional development would be beneficial for their

school, one participant stated, "it is seriously lacking" and "is being overlooked" (Participant

Interview Response, 2022).

Participants not only indicated the need for professional development for teachers

currently in the field, but they also stated that this is vital for pre-service teachers. Bixler-Funk

(2019) concluded in her interviews that pre-service teachers were not adequately prepared to

handle the situations caused by trauma. Several participants echoed this concern and felt that it

needs to be addressed in universities to ensure that the teachers can be trauma-informed when they begin their teaching careers.

Through their reflections, teacher-participants acknowledged the importance of acquiring resources to not only have a more fulsome understanding of trauma, but to also have support that would assist them in their classroom and with their students. Charlton (2019) also indicates that teachers in Saskatchewan do not have the proper means of support and resources. Teachers in the study were concerned about being more self-aware, creating safe places for their students and needing to have a clearer understanding of how triggers can affect their students. The National Child Traumatic Stress Network (2017) indicates that the brain can be easily triggered due to repeated exposure to trauma.

Through their reflection, the participants indicated that they were interested in learning more about various topics related to trauma including intergenerational trauma. According to the Annual Report to Parliament (2020), 17% of Saskatchewan's population is Indigenous. Teachers in this study indicated the importance of understanding intergenerational trauma and how to better serve students who are experiencing this. The Truth and Reconciliation Commission (TRC) of Canada's final report (2020), specifically states in Call of Action number 63 that there needs to be a commitment to Aboriginal education issues. Teacher-participants indicated that they had students who had parents and grandparents who were Residential School survivors or Indian Day School survivors. This prompted them to disclose the importance of understanding trauma and how it impacts their students. Some participants were concerned with society events and pondered if events such as Orange Shirt Day or media about the Residential School graves can also trigger students' behaviour or learning. As several teacher-participants referenced the

TRC Calls to Action that need to be addressed, they shared that understanding how intergenerational trauma affects their students is vital.

Support for Students

The theme of support for students also emerged from the participants' responses. While professional development can assist in providing resources and tools for teachers to use to support students, this theme emerged due to the consistent requests for more student support when working with students who experience trauma. Teacher-participants indicated that they would like to have resources that would assist them in creating trauma-informed spaces for students or helping them to create environments which are trauma-informed. The participants also indicated that they want to be cognizant that their interactions and their vocabulary is trauma-informed. Jennings (2019) elaborates on the importance of creating safe and caring relationships between teachers and students to help them succeed.

Teaching children/youth to self-regulate was also a reoccurring comment that teacher-participants shared. This is also addressed by McInerney and McKlindon (2014) as they shared that to best support students, teachers need strengthen relationships with their students and to be trained to teach them to self-regulate.

As some of the teacher-participants were also cognizant of how their daily interactions could trigger students, they shared the need for support in this area. According to Crosby (2015) interactions with students are important and can be improved through training. The teachers in this study were also aware that students need support in their interactions with their peers. According to the research by Alexander (2019) and Johnson (2017) it is important for teachers to educate students on how to build and maintain relationships, manage their emotions, and understand what their triggers are.

Teachers in this study were aware of the need to educate their students to help them mitigate their trauma reactions; however, they were also aware that they needed the support to do this. Having the tools to help their students was important to them. While they understood what their students needed, teachers from this study were looking for meaningful support to provide their students.

Understanding the Impact of Trauma

Another area that the participants felt strongly about was having a better understanding of how trauma affects students. During the survey, participants shared that they understood that trauma affects behaviour. Answers to how it affects learning significantly changed through the research process. During the survey, much of the discussion about student learning centered around student behaviours impacting learning. Section three of the Moodle course provided participants with an understanding of how trauma impacts a student's cognitive functioning. During their interviews and their online reflective discourse, teacher-participants indicated a deeper understanding of how trauma affects the brain's cognitive functioning as indicated in the literature (Craig 2008; Craig & Sporleder, 2017; Paiva, 2019; Seigel, 2006; The National Child Traumatic Stress Network, 2017).

While some teacher-participants indicated that they were not surprised about the prevalence of trauma, others noted the importance of learning about the statistics as provided by Statistics Canada (2017) and Conroy et al. (2019). Participants shared the importance of understanding how trauma-informed practices could assist them in the classroom. This was made evident when some participants referenced the information from the Moodle, that there are children/youth who do not report their abuse (Statistics Canada, 2019). Teacher-participants

indicated that these students may 'fly under the radar' which might prevent the teacher from seeing the outward effects of trauma.

Another area that teacher-participants discussed was the impact trauma had on student learning. As mentioned earlier, teachers in the survey predominately discussed the outward effects of trauma in terms of physical behaviours. When asked about how learning can be impacted, teacher-participants understood that trauma impacts learning, but many of the responses referenced how physical behaviours impact learning. Teacher-participants also reported that student learning was impacted by their inability to come to school or their tardiness. While teacher-participants also reported in the survey that cognitive functioning would be affected by trauma, many also stated that after the Moodle PD section regarding how trauma affects learning, they had a greater understanding of its impact. One participant's interview response indicated they "did not truly appreciate the impact trauma has on learning" (Participant Interview Response, 2022). According to Craig and Sporleder (2017); Craig (2008) and McInerny and McKlindon (2014) students who experience trauma may encounter problems trying to learn in the classroom. If teachers are not fully aware of the impact of trauma, then as Anderson et al. (2015) and McInerny and McKlindon (2014) claim, teachers need to be supported in their understanding to better assist their students.

Priorities

It was determined through the data derived from the Moodle and the interviews that the teacher-participants felt that there were priorities that were needed to support their students who experience trauma. Through response during the interviews, participants shared the need for teachers, the school personnel and divisions to be trauma-informed. Professional development was a key priority. While teacher-participants felt that they still had more to learn, they also saw

the importance of this for entire schools and divisions and expressed the importance of all

teachers in their schools to be provided with trauma-informed education. Walkley and Cox

(2013) and Crosby (2015) also expound upon the importance of the entire school culture being

trauma-informed. As mentioned earlier, participants felt that those who make decisions for

education need to be included in the professional development and need to place value on it.

A second priority that the teachers in this study felt was needed, was learning how

intergenerational trauma impacts their students. Teachers in this study had students who were

impacted by Residential Schools and Indian Day Schools as members of their families attended

these institutions. As mentioned earlier, they worried about triggers that may affect students,

finding the correct support to assist their students dealing with trauma and providing them with

the necessary resources. Teacher-participants felt that it was important to understand the impact

of intergenerational trauma and ensure they have the tools and resources to assist students.

Supporting Online Professional Development

Anderson et al. (2015) shares the importance of having professional development

opportunities that focus on trauma-informed education and without these opportunities, teachers

are not adequately prepared to properly assist students with trauma. Teachers in this study

unanimously agreed that there is a need for trauma-informed professional development in their

schools and in their divisions. While some participants provided reasons why face to face PD is

important, all participants agreed that online PD can be beneficial.

Teacher-participants who stated they support online professional development discussed

that this delivery eliminated some of the barriers that they face. Barriers that were discussed

centered around access, availability, and affordability. Teacher-participants in rural areas

addressed the fact that getting to PD can be difficult as they need to drive long distances to get to

where the PD is being offered. Besides the access, there is also a substantial cost that is associated with travel which affects their ability to attend the PD. Proponents for online PD cited that online PD offers the ability to take part in the PD at times that are most convenient for their work and home life. As noted earlier, teacher-participants who advocated for online PD stated it would be the more affordable opportunity as face-to-face PD has a bigger impact on their personal PD funds. Dille and Røkenes (2021) also ascertain that online professional development not only alleviates distance barriers, but also can fit into the teachers' schedule more efficiently. Online PD offers flexibility (Bragg et al. 2021) which was also important for teachers in this study.

Traditional face-to-face PD options are "limited by what the people who organize want us to know" (Participant Interview Response, 2022). Online PD provides more options for the teachers. Some participants noted that it does have the ability to allow participants to have conversations, ask questions and build relationships.

While there were teachers in this study who discussed their own preferences to face-to-face PD, they also stated that there is a need to educate stakeholders in trauma-informed education. Having resources that are readily available was important to the participants as many noted that they have not been provided with the information from their division or their ministry.

Limitations

The participants in this study also shared their concerns about PD for all teachers. While they were each strong advocates for trauma-informed education, there were participants who stated that not all teachers will 'buy-in' to this professional development. One participant stated that "there are teachers who do not want to do PD" (Participant Interview Response, 2022). Other participants also shared concerns that there may be teachers who are either apprehensive or

unwilling to learn about and implement trauma-informed strategies and this might limit their ability to fully create trauma-informed environments.

Participants in this study drew attention to the need to address intergenerational trauma and to be better informed in ways to support students in this area. This was a limitation of the study as information presented in the Moodle did not address this. It was through participant interview responses that this limitation was discovered.

Another limitation of this study was the global pandemic, Covid-19. Although teachers were back to class teaching, many teacher-participants considered that the pandemic impacted or further traumatized and marginalized students. While the study's primary focus was on how trauma from abuse and/or neglect can affect students' abilities to learn and regulate, it did not consider how the pandemic further exasperated student trauma or may have caused it.

Chapter Summary

Through reflection and collegial discussions in the Moodle and in the interview, the participants shared their experiences working with and teaching students with trauma. While most of the teacher-participants work with trauma-impacted students, they stated that there was new information provided on the Moodle PD, and they felt that the information also presented an important reminder about trauma and a reminder of how they will approach situations if they arise.

While the teachers who participated in the study were advocates for professional development in trauma-informed teaching and learning and for many had a moderate understanding of the impact of trauma, they still advocated for more support for their students. The teacher-participants determined that through further professional development for them and for professional development for their schools, they could better assist students who are dealing

with trauma. The responses from the participants indicated that there is not only a need for professional development in trauma-informed teaching and learning, but an urgency for such training. Teacher-participants indicated that they see trauma in their work and are looking for ways to better support their students. They also understand that there are teachers who are not trained, who do not understand what trauma does to students and may inadvertently affect the students' chances for success in school. This study highlighted the need for all Saskatchewan teachers to have trauma-informed professional development whether it be as a reminder of the prevalence of trauma for students in Saskatchewan, or for teachers who are currently in schools, unaware of the effects trauma has on students and their learning. Teachers who are trauma-informed can ultimately have a positive effect on student learning and the future of their students.

Chapter 6: Recommendations and Conclusion

Overview

In chapter 1 of the dissertation, data was shared about the prevalence of trauma which illustrated the need for professional development in trauma-informed teaching and learning for teachers of kindergarten to grade 12 students in Saskatchewan. As the researcher, I contend that professional development opportunities in this area is critical due to the prevalence of trauma students in Saskatchewan face (Public Health Agency of Canada, 2018; Social Development Canada, 2019; Statistics Canada, 2017). Evidence was provided that trauma affects students' cognitive functioning, their behaviour responses and abilities to function in the classroom (Alexander, 2019; Sacks & Hadider, 2017; The National Traumatic Stress Network, 2017). This study looked at teacher professional development to raise awareness of trauma and to develop teachers understanding of trauma and its impact on students to positively change teacher practice.

Chapter 2 delved into the literature to provide evidence that supported the need for professional development for teachers in Saskatchewan in trauma-informed teaching and learning. It outlined how trauma affects the developing brain, highlighted the prevalence of trauma children/youth face and detailed how trauma responses can manifest into disruptive behaviours, learning difficulties and adverse long-term effects on the individual. It also identified studies that showed how a trauma-informed approach implemented in schools contributes to the well-being of the students (Carter & Balance, 2019; Frydman & Mayor, 2017; Rishel et al., 2019). The literature also highlighted the importance for teachers to have professional development which is not only a professional obligation (Makovec, 2018), but also a means to improve their practice (Osman & Warner, 2020; Walkley & Cox, 2013). While professional

development is an important element of teachers' work, the literature also provided details into

the importance of providing trauma-informed professional development (Anderson et al., 2015;

McInerney & McKlindon, 2014). This chapter also provided information regarding the use of

online professional development as a tool for supporting teachers' professional development

responsibilities.

Chapter 3 explains the research design for this study. It described the use of practitioner

action research approach. The purpose of using a practitioner action research approach was to

"undertake a deliberate, systematic enquiry to generate understanding based on evidence"

(Anderson & Herr, 2010, p. 313). This chapter also explained how the study was designed to

collect qualitative approach data at three phases of the study. First, an initial survey, second,

during a Moodle course developed to provide participants with an online PD experience and

finally during individual participant interviews. This chapter also described the recruitment

process, ethical considerations and explained how data would be analyzed.

Chapter 4 provides a comprehensive review of the data that was collected through each of

the stages of the research. It provided an overview of the participant demographics, their current

work environments and their beliefs about trauma and trauma-informed practices. The

information in this chapter presented the participants' responses to survey questions, their

responses to the Moodle course and their colleagues and finally to the interview questions that

concluded the research process.

The research findings were examined in Chapter 5 and a discussion of the analysis

occurred. Professional development, support for students, understanding the impact of trauma

and priorities were the themes that emerged from the qualitative data. This data was derived from

the initial survey, the online Moodle, and the concluding interview. This chapter also explored

how the research results aligned with the literature. A key priority evolved from the participant

responses and that was the need for professional development for teachers in trauma-informed

teaching and learning as well as training to assist teachers in understanding the impact of

intergenerational trauma and how to support students. This message was also prefaced with the

concern that there would be teachers opposed to embracing a trauma-informed approach and

how online professional development could support this for Saskatchewan teachers. Finally,

chapter 5 discussed the findings, it also exposed some of the limitations of the study including

the importance of reaching a larger demographic of teachers, a need for a focus on

intergenerational trauma and understanding how the pandemic has affected students.

      This chapter concludes the research by summarizing the importance of providing trauma-

informed professional development to Saskatchewan teachers. It also suggests potential further

research that could be studies and provides recommendations based on the research findings.

Implications of the Research Findings

      The prevalence of trauma Saskatchewan children/youth face is shocking and has

significant potential impacts on learning, relationships, and the wellness of children/youth in the

classroom. If children/youth are to be supported to flourish and grow past these experiences,

teachers play an important role in helping them. The findings of this study support the need for

additional teacher professional development so teachers can recognize the signs of trauma, to

provide trauma-informed approaches to teaching and learning and to provide the support

necessary for students to begin to overcome these experiences and thrive. Approaches to

education have developed and changed for many years. The way teachers educate and

communicate with their students has also evolved, and teachers are recognizing that they too are

evolving and growing as teachers. Professional development is one of the ways teachers develop

and improve upon their practice. By further educating teachers about the effects of trauma and

providing them with the tools and resources to assist their students, there is a significant potential

to assist students not only in the classroom, but teachers also have the potential, through

adequate training, to impact and lessen the long-term effects of trauma.

Recommendations

Based on the results of this study, the following recommendations about professional

development, teacher practice and future results are discussed.

Professional Development and Teacher Practice Recommendations

Professional development intended to support teachers understanding of the prevalence of

trauma students in Saskatchewan face as well as opportunities to aid teachers in understanding

the effects of trauma on children's developing brains would be beneficial. By providing all

Saskatchewan educators with this information, teachers will be better equipped to understand

trauma behaviours, and be prepared to implement means of support for their students.

Professional development should also provide teachers in Saskatchewan with strategies and

resources to further support their efforts to aid students experiencing all forms of trauma,

including intergenerational trauma. It will be important to consult professionals such as those

from the Child Center (CTRC) at the University of Regina as they have resources and

professionals that are trained in this field and their expertise would be valuable in supporting

education of Saskatchewan teachers. On the CTRC website, they make the following statement:

"By researching, understanding, and sharing best practices, we support efforts to reduce the

negative long-term health, social, emotional and economic effects of trauma experienced in

childhood" (Child Trauma Research Centre, n.d.).

Access to online professional development opportunities should be made available for teachers so that they are not limited to its access due to barriers such as distance and affordability. These opportunities could be delivered via, but are not limited to, webinars, virtual-live, professional development meetings or Moodle courses for educators to participate and engage in the information. Coinciding with the professional development, it is recommended that school division websites provide online resources on their websites. While a commitment to ensuring online resources are made accessible on all school division websites is important, teachers first need to be introduced to trauma-informed professional development to raise awareness and understanding of the topic of trauma-informed teaching.

Recommendations for Future Research

Due to the limited nature of this study, a more in-depth study should be considered for both teachers currently in the field and pre-service teachers.

This study appealed to participants who had either a vested interest in trauma-informed learning or were curious about the content. As many of the participants identified that they worked in situations where trauma is evident, this created limitations to the study. A more comprehensive study with a larger group of teachers would be beneficial to further determine teachers in Saskatchewan's understanding of trauma, its prevalence and how to support students.

As many of the participants in this study indicated, pre-service teachers should have a better understanding of trauma-informed teaching and learning before they enter the workforce as educators. Research should be conducted with university pre-service teachers to gather their understanding of this subject. By targeting this group, recommendations could be made to the University of Regina and the University of Saskatchewan in terms of courses that could be offered to their education students.

As indicated earlier, this research did not address teachers' understanding of Intergenerational trauma of its impact on learning and behaviours. By determining teachers' understanding of this, recommendations could be made to the Ministry of Education and to school divisions so that professional development could be provided to educators.

Additional research would build on this study and would assist in determining what teachers who do not work directly with students who show obvious signs of trauma, understand about how it affects learning and behaviours. It would also give a clearer understanding of what teachers in Saskatchewan know about its prevalence and impact.

Chapter Summary

There are many factors that can contribute to students experiencing trauma. There are also students who may be experiencing trauma and are not able to articulate their need for help, may not understand why they are acting out or are not able to learn in the classroom, or are making unhealthy choices that can affect them later in life. What is important to remember is that these children/youth did not place themselves in this position and are coping with the effects of trauma in ways that may not be evident to the teacher in the classroom. By ensuring that teachers are equipped with a strong understanding of the effects of trauma, are aware of the signs and behaviours that surface in children/youth who are dealing with trauma, then education can ultimately assist them in their learning and their experiences at school.

Education is a powerful tool. The more a person understands, the stronger and more knowledgeable they become. By educating the teachers in terms of trauma, we can replace preconceived biases about behaviours and learning and replace them with facts about the impact of trauma and how it affects the students they serve. Professional development for teachers is imperative in changing practice and in informing educators to best serve their students. It is

critical for teachers to understand how trauma impacts their class, their students and how, through their deeper understanding, they can serve their students.

The findings in this study showed that there are teachers who are aware of the impact of trauma and are actively seeking more information to deepen their understanding of how they can assist their students and improve the outcomes for them. However, the study also showed that there are teachers who are requiring more assistance and feel that more resources and tools to assist them is necessary to further support their students. Many of the teachers in this study understood trauma because the trauma in their schools is evident. They work with students in trauma daily. However, the same teachers articulated that there are teachers who do not fully understand the effects of trauma, and these are the teachers that also can benefit from trauma-informed professional development.

Trauma affects students, their families, their peers, and their teachers. Untreated trauma can look to the untrained eye as bad behaviour or a learning disability. It is through training that teachers are best positioned to help students who experience trauma. Proper training, a focus on creating trauma-informed schools and a collective effort from all stakeholders responsible for the education of Saskatchewan students can make a difference in the lives and future of Saskatchewan students.

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Appendix 1 – Trauma-Informed Teacher Questionnaire

What do you identify as?

- Male

- Female

- Non-binary

- I prefer not to identify

How many years of teaching experience do you have?

- Less than 5 years

- 5-10 years

- 10-15 years

- 15 + years

In which area is your teaching position?

- Elementary education (Grades K-5)

- Middle years (Grades 6-9)

- Senior (Grades 10-12)

- Combination of grades

What is your primary teaching responsibility?

- Teacher

- Learning Resource Teacher/Student Support Teacher

- Administrator

- Guidance counsellor

- Other – please specify

Do you teach in:

- Rural Saskatchewan?

- Urban Saskatchewan?

Trauma-Informed Questions

Before answering the following questions, I would like to remind you that the goal of this questionnaire is to create an understanding of what you know about trauma right now and what you still need to know as educators. It is acceptable to be unsure of an answer or have only somewhat of an understanding. It is not your responsibility nor an expectation to research to find out the answers.

Prevalence of Trauma

1. What percentage of students in Saskatchewan do you feel experience forms of trauma?

2. What factors do you think could contribute to students experiencing trauma in Saskatchewan?

3. Could students in your class be experiencing trauma without you being aware? If you answered yes, what strategies are in place to help those students?

Dealing with Trauma in the Classroom

1. What behaviours do you expect to see in your classroom from students who are experiencing trauma?

2. What strategies can you use to assist students with trauma in self-regulation?

3. What are the signs of dysregulated students who are experiencing trauma that may be displayed in your classroom?

4. Are you able to determine if a student's outbursts are caused by underlying trauma?

5. What are some of the disruptive or aggressive behaviours that you experience from your students?

    a. Do you feel you understand why students are being disruptive in your class?

    b. What are some of the reasons for disruptive behaviours or aggression?

6. Have you or any of your colleagues been provided Psychological First Aid training or similar training to assist students who are experiencing trauma?

Trauma and the Brain

1. What do you think happens to the developing brain when experiencing trauma?

2. What are the areas of the brain that are affected when a child experiences trauma?

3. How does trauma affect executive functioning?

4. How do you determine if a child is in trauma or has a learning disability?

Working with Students with Trauma

1. What are trauma-informed competencies that you as an educator can employ or have used in your classroom?

2. Does your school use a trauma-informed model? If so, can you elaborate on the approach?

3. What tools do you have to self-regulate in the event of violent or aggressive student behaviours?

    a. Do you have the tools to ensure student misbehaviour is not escalating because of your response?

    b. Have you considered how your response might impact the situation?

4. Disruptive behaviours are not the only ways trauma affects students in the classroom. What means of support can be provided to assist students whose executive functioning has been impacted by trauma?

Appendix 2 – Online Information on Trauma and Trauma-Informed Learning

Course Description – The purpose of this course is to acquaint participants with the effects of trauma on students. Participants will acquire an understanding of how the brain functions and what happens when students experience trauma. Participants will also be aware of the prevalence of trauma in children and will understand the impact it takes in the classroom.

Outcomes

1. Participants will understand the prevalence of trauma for students in Saskatchewan and in Canada.

2. Participants will understand the effects of trauma on students.

3. Participants will learn strategies to use to help students who experience trauma.

4. Participants will understand that their actions can both help or hinder a child's progress in their classroom.

5. Participants will acquire strategies and have access to resources to provide trauma-informed classrooms.

Sessions

After participating in the questionnaire, participants reviewed the online research about trauma and its effects on students in school.

Next, participants were given insight into strategies to help students with trauma and were invited to participate in discussions regarding practices that can alleviate stresses on students. Participants were also provided online resources that are available and directed to print resources that may be of benefit to them directly.

Finally, interviews took place with participants regarding trauma, what they understand and what they still need to know and learn.

Note – The information provided in the Moodle sessions was obtained from resources that have been recommended by reputable practitioners in the field of trauma-informed teaching and learning.

Note - The information given in the information to participants is not a substitute for long-term professional development in the area of trauma-informed teaching. The intention of this short professional development is to create a baseline of understanding about the need for trauma-informed teaching and to begin to address the importance for this to be a core competency for educators. Professional development courses and potential online learning is the responsibility of educational course designers.

The following information is an overview of the information provided on the Moodle forum.

<div align="center">Section 1 – Prevalence of Trauma</div>

Included in this section are statistics from Canada and Saskatchewan of the prevalence of trauma on children. This information is derived from the Prevalence of Trauma section in the Literature Review p. 17-19.

Reflective Question for section 1:

It is important to get an understanding of the prevalence of trauma. What happens behind closed doors is often not talked about. As indicated above, children often to do not report their abuse of maltreatment which means as educators, we may not even be aware of the abuse, maltreatment or trauma that our student are facing. However, we may witness the effects of trauma which will be discussed in the next section.

How might understanding more about trauma and its effects assist you in your classroom?

Section 2 – Effect of Trauma

Information provided on the effects of trauma on the stress response system.

The effects of trauma on the brain, including information on how trauma effects the hippocampus, the amygdala, and the cortex. This information can be found in the Literature Review p. 19 – 24.

Video: Adverse Childhood Experiences (Aces) - https://www.youtube.com/watch?v=W-8jTTIsJ7Q

Reflective question for section 2:

As a teacher, I have had students over the years who have had outbursts that I just could not explain. To me, at the time, they seemed to come out of no where and definitely upset everyone in the class.

You may have had experiences with students who have became upset, scared or even humiliated you. Think about how our responses can impact a child if we are unaware of the context. What tools do you need to handle these adverse situations?

Section 3 – Effects of Trauma on Executive Functioning.

Information on how trauma effects the student's ability to learn.

Included in this is a description about acute, complex and crossover trauma. Information for this section can be found on page 25-31.

Video – Trauma and Behaviours – Part 1. https://www.youtube.com/watch?v=lPftosmseYE

Reflective question number 3:

As educators, we probably all have had students who have experienced difficulty with their learning. Maybe they had trouble focussing, or trouble remembering details or even instructions.

Given what we have been looking at in terms of how trauma can impact learning, how would this

information have assisted you and why might it be useful to know.

<div align="center">Section 4 – Strategies to help our students.</div>

Video – Science of Childhood trauma. - https://www.youtube.com/watch?v=WZIf_4Eg7_Y

Using the Trauma Treatment Toolbox by Sweeton, (2019) and information from Wolpow (2009)

the following were discussed:

1. Implementing trauma-sensitive strategies.

2. Universal strategies to help all students be connected.

3. Strategies to help all student regulate.

4. Strategies to help all students learn.

Reflective question for section 4:

As you think about your classroom, your current students and of the ones who are no longer in

your class, what resources or tools do you think would be beneficial for you? How could

professional development assist you?

<div align="center">Final Section</div>

In this section, participants will be given the references to the material covered as well as

links to online resources. Also provided in this section, helpful books suggestions which are also

books that are used in the Literature Review.

Appendix 3 – Interview Questions

The questions are suggestions and are not limited solely to the following:

1. Given what you have learned about trauma-informed learning, what are areas in your teaching practice that you feel still require addressing in terms of professional development?

2. Looking through the lens of a trauma-informed educator, what beliefs do you have about children's behaviours in school? Have they changed since being involved in this study?

3. Have you ever experienced a reaction or an altercation with a child you believe now was experiencing trauma? Can you describe your reaction?

4. Can you determine if a child's behaviour was triggered by trauma? Can you tell if trauma is affecting their learning?

5. Has the information provided shed any light into how you feel you will react to student behaviour in the future or student learning?

6. Do you feel your teaching practice will change given the information you received through this study?

Other questions will emerge as the research process unfolds and from the conversations on the Moodle platform. Educators themselves may help to shed light on areas or gaps in understanding.

Appendix 4 – Twitter Recruitment
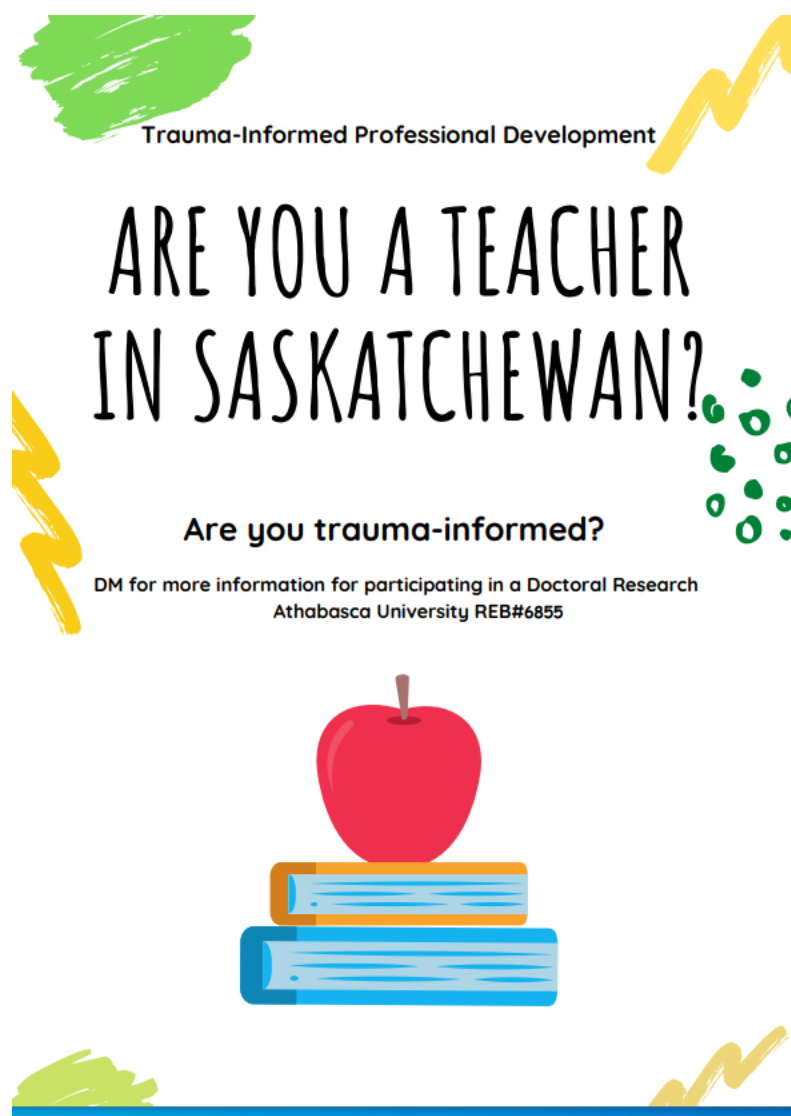
Appendix 5: Athabasca University Research Ethics Approval

Athabasca University
RESEARCH CENTRE

CERTIFICATION OF ETHICAL APPROVAL

The Athabasca University Research Ethics Board (REB) has reviewed and approved the research project noted below. The REB is constituted and operates in accordance with the current version of the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS2) and Athabasca University Policy and Procedures.

Ethics File No.: **24650**

Principal Investigator:
Mrs. Katherine LeBlanc, Graduate Student
Faculty of Humanities & Social Sciences\Doctor of Education (EdD) in Distance Education

Supervisor:
Dr. Susan Bainbridge (Co-Supervisor)
Dr. Marti Cleveland-Innes (Co-Supervisor)

Project Title:
Trauma-Informed Professional Development: A Core Competency for K-12 Teachers in Saskatchewan

Effective Date: February 23, 2022   **Expiry Date**: February 22, 2023

Restrictions:

Any modification or amendment to the approved research must be submitted to the AUREB for approval.

Ethical approval is valid *for a period of one year*. An annual request for renewal must be submitted and approved by the above expiry date if a project is ongoing beyond one year.

A Project Completion (Final) Report must be submitted when the research is complete *(i.e. all participant contact and data collection is concluded, no follow-up with participants is anticipated and findings have been made available/provided to participants (if applicable))* or the research is terminated.

Approved by: **Date: February 23, 2022**

Michael Lithgow, Chair
Faculty of Humanities & Social Sciences, Departmental Ethics Review Committee

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