

# Exploring Implementation of Trauma-Engaged Practices in Alaska Schools

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# Exploring Implementation of Trauma-Engaged Practices in Alaska Schools

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February 2025

To help schools address the negative impacts of childhood trauma, Alaska released *Transforming Schools: A Framework for Trauma-Engaged Practice in Alaska* (Transforming Schools Framework) in 2019, as well as a suite of Trauma-Engaged Schools resources to support implementation of the framework. However, little was known about the extent to which schools used the framework and related resources or implemented practices consistent with the framework. This study sought to develop a better understanding of implementation of trauma-engaged practices in Alaska's schools.

Using existing administrative and survey data gathered by the Alaska Department of Education and Early Development, this study found that Alaska schools' implementation of trauma-engaged practices varies, with most schools demonstrating an emerging level of implementation (the middle level of implementation relative to all study schools). Although most schools reported limited awareness or use of the Trauma-Engaged Schools resources, schools that reported higher awareness or use demonstrated a higher level of implementation. Most school characteristics did not vary by implementation level; however, a school's likelihood of being in the high implementation group increased as its percentage of students in foster care increased. For student outcomes a school's implementation level significantly predicted student ratings on two subscales of the state's School Climate and Connectedness Survey: the caring others scale for elementary school students and the cultural connectedness scale for secondary school students. Implementation level did not significantly predict the remaining student and staff outcomes examined in the study. Interviews with school leaders and educators highlighted the importance of buy-in and support in facilitating high implementation, as well as the value of investing in trauma-engaged practices by hiring support staff, providing training, allocating funding, and establishing partnerships. Interviews also provided actionable suggestions for improving the Transforming Schools Framework and resources to ensure that both are visible, are aligned to other initiatives, and provide concrete strategies for translating concepts into action in a school or classroom setting.

## Why this study?

Students who suffer adversity resulting in trauma during childhood experience poor educational, social, emotional, health, and economic outcomes more frequently than other students, and these negative impacts can persist through adulthood (Petruccelli et al., 2019; Zatti et al., 2017). More than half of Alaska's students experience physical abuse, sexual abuse, emotional abuse, or household dysfunction before kindergarten, and two-thirds of students experience such potentially traumatic childhood events before graduating from high school (Alaska Department of Health and Social Services, 2015). Troubling statistics on suicide in Alaska underscore the gravity of the impacts of trauma among youth. Alaska has the highest youth suicide rate in the nation, with 12.3 per 100,000 youth dying by suicide and 1 in 5 children having attempted suicide in the past year (Centers for Disease Control and Prevention, 2019; Office of Juvenile Justice and Delinquency Prevention, 2022).

The report authors would like to acknowledge Stuart Keogh for contributions to data collection and analysis; Natalie Lacireno-Paquet, Megan O' Malley, and Herb Turner for guidance on study design and analyses; and the Alaska Department of Education and Early Development and the Association of Alaska School Boards for their collaboration to make this study possible.

For additional information, including technical methods, supporting analyses, interview protocols and codebooks, and the Trauma-Engaged Practices and Policies Implementation Survey, access the report appendices at <https://ies.ed.gov/ncee/rel/Products/RWR/Publication/108318>.

The magnitude of this public health crisis has motivated state and community agencies to identify and implement strategies to better support Alaskan youth. As understanding of trauma has grown, many organizations, including schools, highlight the need for trauma-informed approaches. For example, the Substance Abuse and Mental Health Services Administration’s *Concept of Trauma and Guidance for a Trauma-Informed Approach* (Substance Abuse and Mental Health Services Administration, 2014) outlines four key facets of a trauma-informed approach: realizing and understanding trauma and its impact, recognizing the signs of trauma, responding through a trauma-informed approach, and resisting re-traumatization.

Schools are in a unique position to mitigate the impact of childhood trauma because of their connections to children, families, and communities. For example, school-based, trauma-specific treatments can reduce the stress that can develop after an adverse childhood event (Hoover et al., 2018; Rolfsnes & Idsoe, 2011). The federal government has explicitly outlined the use of trauma-informed approaches in training school personnel and providing student support in the Every Student Succeeds Act (Overstreet & Chafouleas, 2016). This context motivated the collaborative development of resources in Alaska to enable schools to better support students, including those experiencing trauma.

In 2019 the Alaska Department of Education and Early Development (AK DEED) and collaborators<sup>2</sup> used input from more than 200 community members to design *Transforming Schools: A Framework for Trauma-Engaged Practice in Alaska* (Transforming Schools Framework) and a suite of supplementary resources (see box 1 for definitions of key terms used in this report).<sup>3</sup> These resources are designed to equip districts and schools across Alaska to implement trauma-engaged practices with their students, families, and staff. The developers of the framework and supplementary resources elected to use the term *trauma-engaged* rather than the more widely used term *trauma-informed*. The Transforming Schools Framework describes a trauma-informed approach as an important first step, in which a shared language and basic understanding of trauma are achieved. It uses the term *trauma-engaged approach* to signify the next step in this work. Trauma-engaged schools embed an understanding of trauma into policies, procedures, and support services; use trauma-reducing approaches in discipline and learning; and draw on a reflective, collaborative, and prevention-oriented approach (Alaska Department of Education and Early Development & Association of Alaska School Boards, 2019).

The Transforming Schools Framework consists of 11 components of trauma-engaged practices. Chapters outlining each component provide background information and research on each component, with suggestions on how to implement each component in district and school settings (table 1). Districts, schools, and educators can elect to implement all or parts of the framework, as appropriate to their local context.

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2. Collaborators included the Alaska Advisory Board on Alcoholism and Drug Abuse, the Alaska Afterschool Network, Alaska Behavioral Health, the Alaska Child Trauma Center, the Alaska Mental Health Board, the Association of Alaska School Boards, the Council on Domestic Violence and Sexual Assault, and the First Alaskans Institute.

3. The Transforming Schools Framework and supplementary resources are available at <https://education.alaska.gov/apps/trauma/webtoolkit/new-framework-page.html>.



## Box 1. Key terms

**Adverse childhood events.** Refers to two types of potentially traumatic experiences occurring before the age of 18, as defined in Alaska: abuse and household dysfunction. Abuse includes physical, sexual, and emotional abuse. Household dysfunction includes living with someone with mental illness or substance abuse, living with someone who has gone to jail or prison, having parents who separated or divorced, and witnessing domestic violence (Alaska Department of Health and Social Services, 2015).

**Administrative outcome data provided by the Alaska Department of Education and Early Development (AK DEED).** Includes school-level average scores on the Alaska System of Academic Readiness (English language arts and math proficiency) and the Alaska Science Assessment (science proficiency) and rates of expulsion, suspension, referrals to law enforcement, attendance, graduation, and dropout for the 2021/22 school year.

**Awareness of Trauma-Engaged Schools resources score.** The average of each school's responses to eight items in the Trauma-Engaged Schools Survey (see appendix D) that assessed staff awareness of Alaska's suite of Trauma-Engaged Schools resources such as *Transforming Schools: A Framework for Trauma-Engaged Practice in Alaska* (Transforming Schools Framework), a toolkit, and professional development resources. For each item, schools rated staff awareness on a scale from 1, no awareness (strongly disagree that staff are aware), to 5, strong awareness (strongly agree).

**Implementation level.** The study team derived three implementation levels based on natural (visual) breaks in the distribution of implementation scores on the Trauma-Engaged Schools Survey as identified by the study team (box table 1). Schools with scores placing them in the lowest level of implementation were characterized as limited implementation, schools with a mid-level of implementation were characterized as emerging implementation, and schools with the highest level of implementation were characterized as high implementation.

**Box table 1. Summary of implementation levels based on Alaska schools' implementation scores on the Trauma-Engaged Schools Survey**

	Implementation level (percent of schools per level)		
	Limited (21)	Emerging (63)	High (16)
Implementation score	14-43	44-55	56-70

Note: A score of 14 represents no implementation, and a score of 70 represents full implementation (see box table below).

Source: Analysis of implementation scores on the Trauma-Engaged Schools Survey.

**Implementation score.** The sum of each school's average response to the 13 scales in the Trauma-Engaged Schools Survey (including the awareness of Trauma-Engaged Schools resources scale, the use of Trauma-Engaged Schools resources scale, and the scales corresponding to each of the 11 components of trauma-engaged practices assessed in the Trauma-Engaged Schools Survey; see below) and each school's average trauma-related eLearning participation score. Among schools with complete survey data, possible implementation scores ranged from 14 to 70, with 14 representing no implementation and 70 representing full implementation (box table 2).

**Box table 2. Calculation of implementation scores**

Component	Score range
Data from the Trauma-Engaged Schools Survey	
Awareness of Trauma-Engaged Schools resources score	1-5
Use of Trauma-Engaged Schools resources	+ 1-5
Trauma-engaged practices score	+ 11-55
Data from the Alaska Department of Education and Early Development	
Trauma-related eLearning participation score	+ 1-5
<b>Implementation score</b>	<b>= 14-70</b>

Source: Analysis of implementation scores from the Trauma-Engaged Schools Survey and data from the Alaska Department of Education and Early Development's eLearning courses.

**School characteristics.** School enrollment; percentages of students in each racial/ethnic group, of economically disadvantaged students (as measured by eligibility for the National School Lunch Program), of English learner students, of students in foster care, of students experiencing homelessness, of migrant students, of students with disabilities, and of students with active-duty parents or guardians; administrative spending; per student spending; number of full-time teachers; and number of teachers in their first year of practice.

**School Climate and Connectedness Survey (SCCS).** Scales from the SCCS were used as school climate outcome measures. Average scores were calculated for each scale from the elementary and secondary school student and staff versions of the validated SCCS. Each student or staff version of the survey included a unique set of scales. The scales used in this study included caring others, social-emotional learning, caring adults, family and community involvement, cultural connectedness, high expectations, peer climate, respectful climate, school safety, student involvement, student delinquent behaviors, student drug and alcohol use, staff beliefs, school leadership and involvement, staff to staff relationships, and staff to student relationships.

**Transforming Schools Framework and suite of Trauma-Engaged Schools resources.** A framework to guide implementation of trauma-engaged practices, published by AK DEED and the Association of Alaska School Boards in 2019, which highlights the rationale for using trauma-engaged practices and includes resources to support implementation. Online supplementary resources include a toolkit, a video library, trauma-related eLearning courses, a professional development series, and website information for other organizations in the state doing related work.

**Trauma-engaged practices and policies.** Practices and policies that align with the 11 components of the Transforming Schools Framework to support schools in planning and coordination of schoolwide efforts, deconstructing trauma, schoolwide practices and climate, support services, family partnership, professional learning, policy considerations, relationship building, skill instruction, cultural integration and community co-creation, and self-care (see table 1 in the body of the main report).

**Trauma-engaged practices score.** The sum of each school's average response to the 11 trauma-engaged practices component scales assessed in the Trauma-Engaged Schools Survey. Possible trauma-engaged practices scores ranged from 11 to 55, with 11 representing no use of trauma-engaged practices and 55 representing strong use of trauma-engaged practices. For each school the score accounts for 11-55 points of the possible 14-70 point implementation score.

**Trauma-Engaged Schools Survey.** A school-level survey developed by AK DEED with support from the Regional Educational Laboratory Northwest and administered in fall 2022 to assess implementation of trauma-engaged practices and policies in public schools across Alaska. The survey included items assessing implementation of practices consistent with each of the 11 components of the Transforming Schools Framework and assessing awareness and use of Alaska's Trauma-Engaged Schools resources. The survey included 77 items arranged into 13 scales, including 11 aligned with the framework's components (referred to as *component scales*), and 20 items assessing additional areas of interest such as perceived facilitators of and barriers to implementation (see appendix A). A copy of the Trauma-Engaged Schools Survey (originally titled Trauma-Engaged Practices and Policies Implementation Survey) is in appendix D.

**Trauma-related eLearning courses.** Asynchronous online professional learning courses housed on AK DEED's eLearning platform for educators in varied roles—such as district and school leaders, teachers, counselors, and support staff—to increase their knowledge and skills related to implementation of trauma-engaged practices.

**Trauma-related eLearning participation score.** A metric gauging each school's participation in trauma-related eLearning, calculated using data on the total number of eLearning sessions, number of staff who have taken any course, and number of courses taken by at least one staff member at each school. Possible trauma-related eLearning participation scores ranged from 1, no participation, to 5, extensive participation (see appendix A).

**Use of Trauma-Engaged Schools resources score.** The average of each school's responses to eight items included in the Trauma-Engaged Schools Survey that assess a school's use of Alaska's suite of Trauma-Engaged Schools resources such as the Transforming Schools Framework, toolkit, and professional development resources. For each item, schools rated staff use on a scale from 1, no use (strongly disagree that staff use the resource), to 5, strong use (strongly agree).

**Table 1. Descriptions of the 11 components of trauma-engaged practices in *Transforming Schools: A Framework for Trauma-Engaged Practice in Alaska***

<p><b>Planning and coordination of schoolwide efforts</b> Highlights the importance of collaboration and alignment among all members of the school community, and recommends strategies for a whole-community approach to school planning. Examples:</p> <ul style="list-style-type: none"> <li>• Infuse trauma-engaged practices into the school’s strategic plans.</li> <li>• Involve stakeholders in planning and coordinating trauma-engaged efforts.</li> </ul>	<p><b>Policy considerations</b> Outlines the policy development process and how policy can support trauma-engaged practices in education. Examples:</p> <ul style="list-style-type: none"> <li>• Align school policies with social-emotional learning and trauma-engaged approaches.</li> <li>• Involve students and community members in policy decisions.</li> </ul>
<p><b>Deconstructing trauma</b> Explains the importance of trauma-engaged practices and how trauma can adversely affect children’s learning and growth. Examples:</p> <ul style="list-style-type: none"> <li>• Apply trauma-engaged practices to discipline.</li> <li>• Use strengths-based language throughout the community.</li> </ul>	<p><b>Relationship building</b> Underscores relationship building as a foundation to trauma-engaged practices. Positive relationships lead members of the school community to feel safer and more secure at school. Examples:</p> <ul style="list-style-type: none"> <li>• Recognize and celebrate a wide range of student successes.</li> <li>• Conduct ongoing data reviews to assess relationships and satisfaction among members of the school community.</li> </ul>
<p><b>Schoolwide practices and climate</b> Emphasizes the impact of a positive school climate, and suggests ways to include all members of the school community in creating a safe and supportive learning environment. Examples:</p> <ul style="list-style-type: none"> <li>• Maintain a safe and welcoming physical school environment.</li> <li>• Use the School Climate and Connectedness Survey or other school climate assessments.</li> </ul>	<p><b>Skill instruction</b> Explains the importance of social-emotional skills in mitigating the impacts of trauma and the role of adults in modeling and teaching these skills to students. Examples:</p> <ul style="list-style-type: none"> <li>• Encourage the development of overall social-emotional skills.</li> <li>• Develop a process to identify developmentally matched social-emotional skills to meet schoolwide behavior expectations.</li> </ul>
<p><b>Support services</b> Addresses the essential role of support service providers (including nurses, counselors, and special education teachers) and offers solutions to provider shortages. Examples:</p> <ul style="list-style-type: none"> <li>• Engage with local or regional behavioral health organizations to support student needs.</li> <li>• Develop peer-to-peer programs.</li> </ul>	<p><b>Cultural integration and community co-creation</b> Recognizes the importance of culturally responsive teaching practices and the potential in partnering with local community leaders, families, tribes, and businesses. Examples:</p> <ul style="list-style-type: none"> <li>• Incorporate cultural and community context in curricula.</li> <li>• Engage with local tribes or cultural groups.</li> </ul>
<p><b>Family partnership</b> Highlights the role of families in positive student outcomes, and covers principles in partnering with families. Examples:</p> <ul style="list-style-type: none"> <li>• Use social media to share opportunities or key messages with family and community members.</li> <li>• Develop an inventory of approaches for building family connections.</li> </ul>	<p><b>Self-care</b> Acknowledges the burnout and secondary trauma educators face, and provides tools for educators to practice self-care. Examples:</p> <ul style="list-style-type: none"> <li>• Instruct staff in self-care techniques.</li> <li>• Support staff in prioritizing self-care in concrete ways.</li> </ul>
<p><b>Professional learning</b> Focuses on a community-responsive approach to trauma-engaged teaching practices through professional learning communities and ongoing professional development. Examples:</p> <ul style="list-style-type: none"> <li>• Allot time to staff for professional learning.</li> <li>• Encourage staff to develop or co-develop professional learning experiences.</li> </ul>	

Source: Summary of trauma-engaged approach components based on the Transforming Schools Framework (Alaska Department of Education and Early Development & Association of Alaska School Boards, 2019).

To answer questions about Alaska educators’ awareness and use of the Trauma-Engaged Schools resources and the extent to which schools implemented trauma-engaged practices, AK DEED partnered with the Regional Educational Laboratory (REL) Northwest to develop and administer a Trauma-Engaged Schools Survey and conduct a study on awareness and use of Alaska’s Trauma-Engaged Schools resources and implementation of trauma-engaged practices. In addition to examining implementation, the REL Northwest study team explored the associations between implementation level and school characteristics and between implementation level and student and staff outcomes. These exploratory aspects of the study reflect an understanding that school characteristics (such as enrollment and student demographics) may affect implementation of school programs (Domitrovich, 2008) and that student and staff outcomes (such as perceptions of school climate) may be affected by schoolwide practices such as trauma-engaged practices (Bear et al., 2017).

For AK DEED and others interested in trauma-engaged practices, the study findings offer a clearer understanding of how schools can implement such an approach and how educators and administrators can learn about and use Alaska’s Trauma-Engaged Schools resources, including by applying the study’s actionable recommendations. The study also provides preliminary evidence on the associations between implementation of trauma-engaged practices consistent with Alaska’s Transforming Schools Framework and school characteristics and student and staff outcomes.

## Research questions

The study focused on four research questions:

1. What are the breadth and depth of school-level implementation of trauma-engaged practices across the state as revealed by responses to the fall 2022 administration of the Trauma-Engaged Schools Survey?
  - a. To what extent are schools aware of or using the suite of Trauma-Engaged Schools resources?
  - b. Does implementation of trauma-engaged practices vary between schools that are aware of or using the Trauma-Engaged Schools resources and other schools?
2. Are there associations between levels of implementation of trauma-engaged practices, as measured by the fall 2022 Trauma-Engaged Schools Survey and trauma-related eLearning data, and 2021/22 school characteristics?
3. Are there associations between levels of implementation of trauma-engaged practices, as measured by the fall 2022 Trauma-Engaged Schools Survey and data on trauma-related eLearning, and school-level student or staff outcomes based on 2021/22 administrative data from AK DEED and the Association of Alaska School Boards?
4. Based on responses to the fall 2022 Trauma-Engaged Schools Survey and interviews in 2023, what are the facilitators of and barriers to awareness and use of the suite of Trauma-Engaged Schools resources in schools across the state and to implementation of trauma-engaged practices?

Box 2 provides information about the study methodology and its limitations.

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### Box 2. Data sources, study sample, analytic approach, and limitations

**Data sources.** This study relied on school-level data collected by the Alaska Department of Education and Early Development (AK DEED) and the Association of Alaska School Boards (AASB). AK DEED provided data from the Trauma-Engaged Schools Survey collected in fall 2022 to assess implementation of trauma-engaged practices and policies; 2021/22 administrative data on school characteristics (such as school enrollment, administrative spending, and racial/ethnic composition of students) and student and staff outcomes (such as rates of discipline, attendance, and graduation); and trauma-related eLearning data capturing participation in Trauma-Engaged Schools–related professional learning between June 2017 and January 2023 (see appendix A). AASB provided data from the elementary school student, secondary school student, and school staff responses to the spring 2022 administration of the School Climate and Connectedness Survey (SCCS). To capture facilitators of and barriers to implementation of trauma-engaged practices, the study team conducted interviews with district leaders, school leaders, teachers, and support staff (such as school counselors, prevention intervention specialists, reading specialists, and paraprofessionals) in fall 2023.

**Study sample.** For research questions 1-3 the sample included the 271 schools that submitted a Trauma-Engaged Schools Survey with responses to at least 80 percent of survey items and 80 percent of items within each survey scale. This sample represents 54 percent of public schools in Alaska. For research question 4 the sample included nine district leaders (such as superintendents or district-level administrators), nine school leaders (such as principals or school-level administrators), nine teachers, and nine support staff. The study team generated the sample for research question 4 through purposive



outreach to individuals in each role in schools representing varied levels of implementation, regions of Alaska, and districts (see appendix A). Individuals who did not respond or who declined to participate were replaced by individuals in schools with similar characteristics, to the extent possible.

**Analytic approach.** The Trauma-Engaged Schools Survey, which was organized into sections representing each of the 11 components of the Transforming Schools Framework, assessed the extent to which schools agreed that their staff were aware of the Trauma-Engaged Schools resources, used the Trauma-Engaged Schools resources, and implemented a variety of trauma-engaged practices. The survey also inquired about facilitators of and barriers to implementation. AK DEED asked school leaders in each public school in Alaska to assemble teams familiar with the school's use of trauma-engaged practices and to allot one hour to collaboratively complete the survey. AK DEED requested this collective approach so that survey data would represent a variety of perspectives at each school. The study team used the survey data in conjunction with school-level data from AK DEED capturing school characteristics and administrative outcomes, school-level data from AASB capturing school climate from the SCCS, and interview data collected by the study team.

For research question 1 on the extent of school-level implementation of trauma-engaged practices, the study team generated an implementation score for each school based on an average of its responses to each scale on the fall 2022 Trauma-Engaged Schools Survey, together with staff participation in trauma-related eLearning. The study team examined the distribution of implementation scores and, based on natural breaks in the data, assigned schools to one of three implementation levels: limited, emerging, or high (see box 1). Natural breaks were identified based on points in the distribution of implementation scores for which study team visualization revealed large increases or decreases in the number of schools with a particular implementation score. For research question 1a the study team examined the average response for each Trauma-Engaged Schools Survey item and scale. For research question 1b the study team created a trauma-engaged practices score comprising average responses on scales assessing each of the 11 components of trauma-engaged practices and policies included in the Transforming Schools Framework and assessed in the Trauma-Engaged Schools Survey (see figure in box 1). The study team examined trauma-engaged practices scores in conjunction with awareness of Trauma-Engaged Schools resources scores and use of Trauma-Engaged Schools resources scores using mixed-effects multilevel regressions, which accounted for schools being nested in districts and relevant school-level characteristics (see appendix A).

For research question 2 on associations between levels of implementation of trauma-engaged practices and school characteristics, the study team examined average characteristics of schools at each implementation level. Next, the study team used a multinomial logistic regression model to determine whether variations in average school characteristics across implementation levels were statistically significant, after accounting for schools being nested in districts and relevant school-level characteristics (see appendix A). The study team also conducted sensitivity analyses using implementation scores instead of implementation levels to examine the consistency of findings between these two metrics (see appendix B).

For research question 3 on associations between levels of implementation of trauma-engaged practices and student and staff outcomes, the study team examined average student and staff outcomes for schools at each implementation level. Next, the study team conducted a series of mixed-effects multilevel regressions to determine whether implementation levels were significantly associated with these outcomes, after accounting for schools being nested in districts and relevant school-level characteristics (see appendix A). The study team also conducted sensitivity analyses using implementation scores instead of implementation levels to examine the consistency of findings between these two metrics (see appendix B).

Finally, for research question 4 on facilitators of and barriers to awareness and use of the Trauma-Engaged Schools resources and implementing trauma-engaged practices, the study team conducted one-hour interviews with district leaders, school leaders, teachers, and support staff in fall 2023. Using a semi-structured interview protocol specific to each interviewee's role (see appendix C), interviewers asked about the facilitators of and barriers to using the Trauma-Engaged Schools resources and implementing trauma-engaged practices. Interviews were recorded and transcribed. The study team coded the data (see appendix C) and then analyzed the coded data to identify the most common facilitators of and barriers to implementation overall and by interviewee role (see appendix A). The study team examined these data in conjunction with the Trauma-Engaged Schools Survey data that asked schools to indicate whether specific factors served as a facilitator of or barrier to implementation.

**Limitations.** This study has several limitations. First, the self-reported data may not fully reflect implementation. Though trauma-related eLearning data provided additional insights into the use of the Trauma-Engaged Schools resources, school self-reported survey data were predominantly used to assess school awareness or use of the Trauma-Engaged Schools resources and to establish implementation scores and levels for trauma-engaged practices. Similarly, even though schools were provided with links to the Trauma-Engaged Schools resources when they took the survey, respondents might not have been familiar with all the terminology in the survey items. Just 58 percent of the state’s schools responded to the survey, and only 40 percent of submitted surveys were completed by more than one person, despite requests that schools assemble teams to respond to the survey in order to reflect multiple perspectives. Similarly, because only 60 percent of schools had the required data from the SCCS, the study team conducted a nonresponse bias analysis to identify the possibility of bias on several items and subsequently adjusted the results using multiple imputation (see appendix B). After exploring three approaches for categorizing schools into implementation levels and weighing the tradeoffs for each strategy, the study team and AK DEED settled on the natural breaks approach as most accurately representing the data and being the most intuitive for partners in Alaska to use (see appendix A). However, these thresholds might not reflect substantial distinctions in implementation. Similarly, because the thresholds were based on natural breaks in the data when displayed in a histogram and not on theoretical differences in implementation, this could have introduced bias in categorizing schools into implementation levels.

Second, findings from this study might apply only to the schools that responded to the Trauma-Engaged Schools Survey. The study focused on the 271 schools with sufficient survey data (see table A4 in appendix A), which represent 54 percent of public schools in the state. Although the study team had planned to apply statistical corrections to allow generalization to all schools in the state, these corrections were not possible given the nuances of the data (see appendix B). It is possible that there are unmeasured differences between schools that were and those that were not included in this study. For example, participating schools might be more familiar with the Trauma-Engaged Schools resources or engage in greater implementation of trauma-engaged practices than nonparticipating schools. If schools that were more familiar with the materials were more likely to participate in the survey, the study might have overestimated the level of implementation of trauma-engaged practices. Thus, findings from this study should be interpreted relative to the study sample rather than to all schools in Alaska.

Third, the spring 2022 SCCS data used in this study were available for only a limited number of Alaska school. Schools have the option to participate in the SCCS or use another school climate tool. Only 60 percent of districts participated in the spring 2022 administration of the SCCS. Although this is a limitation, a statistical correction was applied to analyses using SCCS data to ensure that the analyses represented the full population of schools included in the study (see appendix B).

Finally, the findings described in this report are not indicative of causal relationships. Findings should be interpreted as descriptive and are intended to explore associations between implementation of trauma-engaged practices and school characteristics and student and staff outcomes.

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## Findings

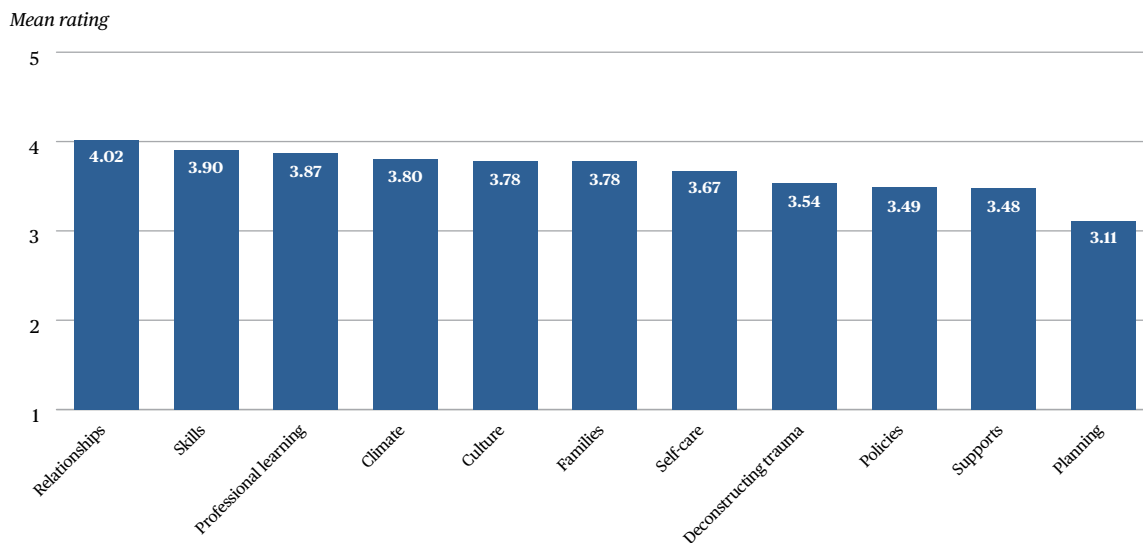
Overall, schools varied in their implementation of trauma-engaged practices. Schools that were aware of or using the Trauma-Engaged Schools resources were more likely to implement trauma-engaged practices. Though most school characteristics did not meaningfully vary across implementation levels, one exception was schools with a higher proportion of students in foster care, which was associated with higher implementation. Although most student and staff outcomes were similar across implementation levels, ratings on two scales from the SCCS rose with implementation levels: elementary school students’ perceptions that they had caring others around them and secondary school students’ perceptions of cultural connectedness.

**Trauma-engaged practices that can be performed by individual educators were implemented more frequently than those requiring a policy or systems approach, though some staff might not have recognized that practices they were implementing are trauma engaged**

Implementation varied across the scales aligned with the Transforming Schools Framework’s 11 components of trauma-engaged practices, with average scores on these components ranging from 3.11 to 4.02 on a 5-point scale, with 1 indicating strong disagreement that the component is being implemented and 5 indicating strong agreement (figure 1). Average ratings were highest for implementation of components that individual educators could directly implement in their classrooms without a high level of coordination at the school or district level: relationship building (mean = 4.02, standard deviation = 0.60) and trauma-relevant skill instruction (mean = 3.90, standard deviation = 0.66; see appendix A and table B1 in appendix B). Three practices within these two scales had the highest average ratings (as measured by individual items): the school recognizes and celebrates a wide range of student successes (mean = 4.23, standard deviation = 0.68), staff develop plans to build positive relationships (mean = 4.10, standard deviation = 0.77), and the school encourages development of social-emotional skills (mean = 4.30, standard deviation = 0.73).

Average ratings were lowest for component scales that required school- or district-level coordination, particularly the components of planning and coordination of schoolwide efforts (mean = 3.11, standard deviation = 0.86), provision of support services (mean = 3.48, standard deviation = 0.69), and policy considerations (mean = 3.49, standard deviation = 0.73; see appendix A and table B1 in appendix B). On average, schools reported a response of disagree some/agree some when asked if they implement practices within these components. Four practices within these components had the lowest average ratings (as measured by individual items): collaboration between district and school staff to develop well-aligned trauma-engaged policies (mean = 3.44, standard deviation = 0.97); alignment of school policies, guidelines, and handbooks on trauma-engaged practices (mean = 2.96, standard deviation = 1.01); school peer-to-peer programs (mean = 2.93, standard deviation = 1.12); and at least one half-time health provider at the school (mean = 2.80, standard deviation = 1.68).

**Figure 1. Components of trauma-engaged practices that can be performed by individual educators were implemented more frequently than components requiring a policy or systems approach**



Note: Potential responses range from 1, strongly disagree that the component was being implemented, to 5, strongly agree.

Source: Analysis based on 2022 Trauma-Engaged Schools Survey data provided by the Alaska Department of Education and Early Development.

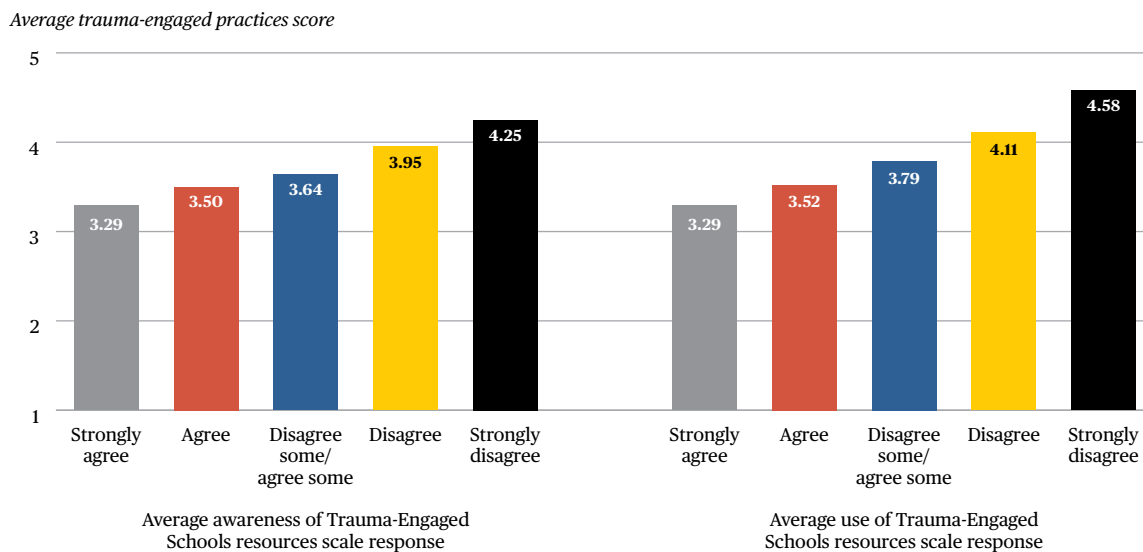
These findings suggest that trauma-engaged approaches that require school- or district-level structural shifts may be more difficult to accomplish. However, schools gave relatively high ratings to the professional learning component (mean = 3.87, standard deviation = 0.68) despite professional learning typically requiring a school or districtwide effort. For example, on average, schools indicated that they agreed or strongly agreed that staff have time allotted for professional learning (mean = 4.24, standard deviation = 0.79), and they agreed that staff have access to professional learning on trauma-engaged practices (mean = 3.90, standard deviation = 0.83; see appendix A and table B1 in appendix B).

Related, most interviewees (89 percent) described using at least one practice consistent with trauma-engaged practices; however, some participants did not recognize that the practices they described were trauma-engaged. For example, many interviewees described the use of social-emotional learning, restorative practices, de-escalation, community dialogue, self-care, mindfulness, alternatives to punitive discipline, positive behavioral intervention systems, and multi-tiered systems of support to coordinate care without characterizing them as trauma-engaged practices.

***Schools that reported higher awareness or use of the Trauma-Engaged Schools resources also reported higher implementation of trauma-engaged practices; however, a substantial proportion of schools reported not being aware of or not using these resources***

Findings from this study are clear: it is important for school staff to be aware of and use the Trauma-Engaged Schools resources to support their ability to implement trauma-engaged practices. Specifically, increased awareness and use of Alaska’s Trauma-Engaged Schools resources were significantly associated with increased implementation of trauma-engaged practices and policies, after school characteristics were controlled for (see table B3 in appendix B). Schools that reported low awareness or use of the Trauma-Engaged Schools resources had average trauma-engaged practices scores corresponding to responses of disagree some/agree some or agree on survey items assessing implementation of trauma-engaged practices (figure 2). In contrast, schools that reported high awareness or use of the Trauma-Engaged Schools resources had average trauma-engaged practices scores corresponding to responses of agree/strongly agree.

**Figure 2. Average trauma-engaged practices scores increased as average awareness or use of the Trauma-Engaged Schools resources increased**



Note: Potential responses range from 1, strongly disagree on awareness or use of trauma-engaged practices, to 5, strongly agree.

Source: Analysis based on 2022 Trauma-Engaged Schools Survey data provided by the Alaska Department of Education and Early Development.



**Table 2. Implementation of trauma-engaged practices components, by level of awareness or use (mean)**

Level of awareness or use	Planning	Policy	Trauma	Relationships	Climate	Skills	Supports	Culture	Family	Self-care	Professional learning	All practices
<b>Awareness</b>												
Strongly disagree	2.19	2.89	2.93	3.73	3.64	3.54	3.43	3.4	3.58	3.21	3.64	3.29
Disagree	2.65	3.24	3.31	3.97	3.68	3.68	3.35	3.60	3.75	3.55	3.69	3.50
Disagree some/agree some	3.18	3.49	3.52	3.96	3.76	3.83	3.44	3.73	3.75	3.63	3.87	3.64
Agree	3.61	3.86	3.89	4.25	4.00	4.16	3.64	4.16	3.95	3.92	4.10	3.95
Strongly agree	3.95	4.18	4.47	4.35	4.36	4.85	3.99	4.06	3.92	4.41	4.05	4.25
<b>Use</b>												
Strongly disagree	2.29	2.89	2.98	3.69	3.43	3.54	3.48	3.38	3.53	3.35	3.59	3.29
Disagree	2.82	3.23	3.40	3.97	3.73	3.78	3.24	3.64	3.71	3.53	3.79	3.52
Disagree some/agree some	3.42	3.70	3.67	4.07	3.88	3.97	3.60	3.89	3.85	3.74	3.96	3.79
Agree	3.85	4.10	4.12	4.26	4.14	4.45	3.75	4.19	3.98	4.28	4.06	4.11
Strongly agree	4.37	4.5	4.76	4.88	4.71	4.78	4.49	4.63	4.57	4.27	4.45	4.58

Note: Potential responses range from 1, strongly disagree that the component was being implemented, to 5, strongly agree.

Source: Analysis based on 2022 Trauma-Engaged Schools Survey data provided by Alaska Department of Education and Early Development.

This pattern of scores for overall trauma-engaged practices extended to scores for the individual component scales of trauma-engaged practices: schools reporting higher awareness or use of the Trauma-Engaged Schools resources had higher scores for implementation of trauma-engaged practices and higher average scores for implementation of each individual trauma-engaged practices component assessed in the survey (table 2).

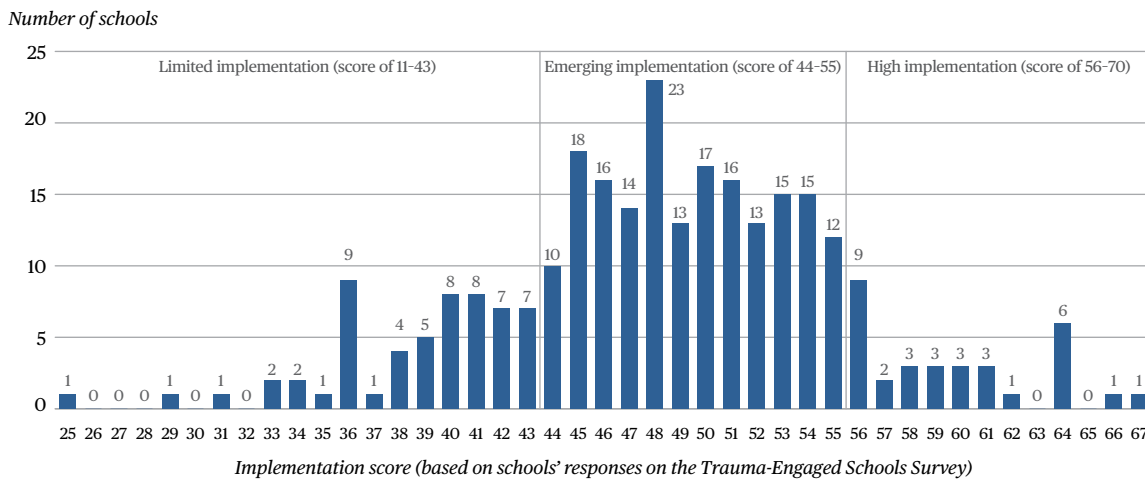
The findings derived from the descriptive data are consistent with inferential analyses indicating that both awareness and use of the Trauma-Engaged Schools resources are significantly associated with the extent to which schools implement trauma-engaged practices. In regression models that controlled for school characteristics, both awareness and use of the Trauma-Engaged Schools resources were significantly associated with increased implementation of trauma-engaged practices (see table B3 in appendix B).

Despite the association between awareness and use of the Trauma-Engaged Schools resources and implementation of trauma-engaged practices, many schools were not aware of or using these resources. Most schools (77 percent) indicated disagreement or a neutral response when asked if they were aware of the Trauma-Engaged Schools resources, and even more schools (89 percent) indicated disagreement or a neutral response when asked about their use of the Trauma-Engaged Schools resources.

### ***Most schools demonstrated emerging implementation***

Implementation scores ranged from 14 to 70 for schools based on their responses on the Trauma-Engaged Schools Survey to questions about awareness of the Trauma-Engaged Schools resources (1-5 points), use of the Trauma-Engaged Schools resources (1-5 points), implementation of trauma-engaged practices (11-55 points), and participation in trauma-related eLearning (1-5 points). Schools were categorized into one of three implementation levels based on natural breaks in the distribution of implementation scores as identified by the study team (figure 3; see box 2). Most schools (170 schools, or 63 percent of study schools) that participated in the survey had implementation scores at the emerging implementation level—the middle level of implementation relative to all schools in the study. The limited implementation group, the lowest level of implementation, included 57 schools (21 percent), and the high implementation group included 44 schools (16 percent).

**Figure 3. Implementation scores followed a normal distribution**



Note: The three implementation levels were based on natural breaks in the distribution of implementation scores as identified by the study team: limited implementation (implementation scores of 14-43), emerging implementation (44-55), and high implementation (56-70). Implementation scores are the sum of each school’s average response to the 13 scales in the Trauma-Engaged Schools Survey and average trauma-related eLearning participation score. Possible scores range from 14, no implementation, to 70, full implementation.

Source: Analysis based on 2022 Trauma-Engaged Schools Survey data and eLearning course data provided by Alaska Department of Education and Early Development.

***School characteristics had limited utility in predicting implementation level***

Most school characteristics included in the study—such as enrollment, student racial/ethnic composition, and percentage of economically disadvantaged students—were similar across implementation levels after the regression models controlled for other school characteristics. The only characteristic that showed consistent differences across implementation levels was the percentage of students in a school who were in foster care (see table B4 in appendix B). Regression models that controlled for relevant school characteristics, such as student enrollment and per student spending, revealed a statistically significant association between having a higher percentage of students in a school in foster care and the likelihood of being in a higher implementation group (see table B5).

***Implementation level had a positive association with students’ perceptions about the presence of others who care and feelings of cultural connectedness at their school***

A school’s implementation level was significantly associated with its scores on two SCCS scales: the elementary school caring others scale and the secondary school cultural connectedness scale. On the elementary school student survey, after relevant school-level characteristics were controlled for, high implementation schools had higher average scores on the SCCS caring others scale than did limited implementation schools. This scale asks students about their relationships with other students and adults at their school and with adults in their community. Attending a school with high implementation was significantly associated with scores on the SCCS caring others scale that were 0.10 point higher than scores at schools with limited implementation (see table B7 in appendix B). On the secondary school student survey, after relevant school-level characteristics were controlled for, scores on the SCCS cultural connectedness scale were significantly higher in emerging and high implementation schools than in limited implementation schools. This scale asks students about their sense of belonging to their culture and the extent to which their school values their culture. Attending a school with emerging implementation was significantly associated with scores on the cultural connectedness scale that were 0.81 point higher than scores at schools with limited implementation. Attending a school with high implementation was significantly associated with scores that were 1.43 points higher than scores at schools with limited implementation.







Implementation level was not significantly associated with the remaining scales on the elementary and secondary school versions of the SCCS or with any scales on the staff version of the SCCS. Additionally, implementation level was not significantly associated with any AK DEED administrative outcomes, including standardized test scores in English language arts, math, and science and rates of discipline, referrals to law enforcement, attendance, graduation, and dropout.

***Support from district leadership, school leadership, staff, families, and the community facilitated implementation of trauma-engaged practices, while competing priorities, lack of community buy-in, lack of cultural alignment, and challenges in finding the Trauma-Engaged Schools resources were barriers to implementation***

Interviews and survey responses about the facilitators of and barriers to implementing trauma-engaged practices revealed a clear message: high levels of implementation require leaders, staff, families, and the community to prioritize trauma-engaged practices (figure 4), whereas staff shortages and turnover create challenges for implementation. (Interviewee responses, by role group and overall, on the facilitators of trauma-engaged practices are summarized in table B8 in appendix B, and responses on barriers to trauma-engaged practices are summarized in table B9.)

*“People will prioritize what their leaders prioritize.”* More than half of responding schools (51 percent) and more than a third of interviewees (39 percent) reported that district leaders are important for facilitating implementation of trauma-engaged practices. In particular, school leaders (67 percent) and district leaders (56 percent) noted the importance of district leadership. Additionally, 70 percent of surveyed schools and 36 percent of interviewees viewed school leadership’s prioritizing of trauma-engaged practices as an important facilitator—particularly teacher interviewees (56 percent) and interviewees from high implementation schools (56 percent). One school leader emphasized this point: “People will prioritize what their leaders prioritize. If we’re only talking to them [educators] about reading and we never ask them how their kids are feeling, then of course that’s all they’re going to focus on.”

**Figure 4. Interviewees reported support and investments from multiple interest holders as key facilitators to implementation**

Supports		Investments	
	Prioritization by district (39%)		Hiring support staff (64%)
	Prioritization by school leadership (36%)		Access to and time for trainings (64%)
	School staff buy-in (53%)		Development and cultivation of community partnerships (61%)
	Community co-creation (28%) and community support or buy-in (39%)		Funding (31%)

Source: Analyses based on 2023 interviews conducted by the Regional Educational Laboratory Northwest study team.

*“[The] building principals live, breathe, eat [trauma-engaged practices]. It’s in everything that they do. It’s how they connect to families, it’s how they connect to kids, and they model that, and they don’t tolerate any different. ... It’s palpable in a school; I can walk into a school and feel whether or not people are about meeting kids where they are.”*

*–District leader*

*Buy-in among school staff also facilitates implementation of trauma-engaged practices.* More than half of interviewees raised the importance of school staff buy-in (53 percent) when asked about key facilitators of implementation of trauma-engaged practices (see figure 4). The rate was highest (70 percent) for interviewees in emerging implementation schools. Although only a minority of interviewees (14 percent) discussed the importance of family support or buy-in, most of the interviewees who described this facilitator were in high implementation schools.

Interviewees described the value of community co-creation of trauma-engaged practices (28 percent) and community support or buy-in (39 percent) as important facilitators of implementation (see figure 4). Just under half (47 percent) of interviewees viewed lack of community buy-in or cultural alignment as one of the greatest barriers to implementation.

*Interviewees suggested that investments in staffing, training time, community partnerships, and family partnerships were important facilitators of trauma-engaged practices.* Interviewees mentioned investments in staffing, training, and partnerships as ways to prioritize trauma-engaged practices. Having school counselors and other support staff available to drive and encourage trauma-engaged practices was viewed as vital by nearly two-thirds of interviewees (64 percent), particularly district leaders (100 percent) and school leaders (78 percent). Interviewees also highlighted the value of providing staff with relevant training opportunities (64 percent). Although interviewees in most role groups viewed access to training as a facilitator, when asked about key facilitators to implementation, only 11 percent of teachers identified training. Yet when asked about key barriers to implementation, nearly half of teachers (44 percent) mentioned lack of training, a higher proportion than for the other role groups.

Other types of investments that were viewed as facilitators by interviewees were community partnerships, family partnerships, and funding. Most interviewees (61 percent) considered cultivating community partnerships as a facilitator to implementation, and more than a quarter of interviewees (28 percent) described investing in building partnerships with families as a facilitator. Notably, most of the interviewees that described family partnerships as a facilitator were in high implementation schools (56 percent). Finally, 31 percent of interviewees flagged adequate funding as an important facilitator to implementation, and 36 percent identified lack of funding as an important barrier. District leaders, in particular, focused on funding in their discussions of facilitators and barriers, with 56 percent describing adequate funding as a facilitator and 56 percent describing lack of funding as a barrier.

*Competing priorities, including a strong focus on academic achievement, are barriers to implementation of trauma-engaged practices.* Having competing priorities was viewed as a barrier to implementing trauma-engaged practices (44 percent of interviewees). This opinion was especially evident among teachers (56 percent) and support staff (56 percent). The Alaska Reads Act of 2022, which aims to ensure that all students are reading by grade 3, was consistently described as a competing priority. As one district leader explained, “Honestly, right now it’s all about literacy. It’s all about reading. So that’s where a lot of the professional development and funding is going right now because it has to.” However, some interviewees saw the Alaska Reads Act as an opportunity to integrate trauma-engaged practices into reading instruction. For example, a district leader explained: “Within [our new reading] program, there are routines that support building relationships, skill instruction, and ... family partnership from a teacher level. [We should be] really explicitly calling out some of those things; don’t skip these things, because when you do these things, even though they might take a minute or two more, they really do support some of those other competencies that we’re hoping for. ... It’s not a separate thing.”



*Most interviewees discussed at least one barrier to using the Trauma-Engaged Schools resources.* More than three quarters of interviewees (78 percent) reported experiencing at least one barrier that affected their use of Alaska’s Trauma-Engaged Schools resources. School leaders (89 percent) and teachers (89 percent) were most likely to identify barriers, followed by district leaders (78 percent) and support staff (56 percent). The most commonly reported barriers were a lack of alignment and coherence between the Trauma-Engaged Schools resources and priorities of the district or school (31 percent), insufficient information about how to translate concepts covered in the Trauma-Engaged Schools resources into action (28 percent), and challenges in knowing where to find and how to access the resources (25 percent).

Across school implementation levels, interviewees in schools with limited implementation (25 percent) and emerging implementation (30 percent) cited barriers related to access and visibility more commonly than did interviewees in high implementation schools (11 percent). This suggests that educators working in schools with higher levels of implementation may be more familiar with how to find and access the Trauma-Engaged Schools resources. In contrast, interviewees in high implementation schools described barriers related to lack of alignment and coherence between the Trauma-Engaged Schools resources and priorities of the district or school (33 percent) and insufficient information about how to translate concepts into action (33 percent) at a higher rate than interviewees in schools with limited implementation (25 percent for both barriers) and emerging implementation (30 percent for alignment and coherence and 10 percent for translating of concepts into actions).

## Implications

*“I think that for most educators, the thing that is most difficult for them is actionable, specific techniques and things to do. So it’s like you get people that are like, ‘Okay, yeah, I understand this concept, but how do I actually apply this in a way that makes sense?’”* *–School leader*

This study found low levels of implementation of trauma-engaged practices for many schools, as well as an association between implementation level and certain positive student school climate outcomes. Although the thresholds for the three implementation levels applied in this study are not based on exact measures, categorizing schools according to their responses on the Trauma-Engaged Schools Survey and their participation in trauma-related eLearning offers insight into how schools may benefit from efforts by AK DEED and its partners to more fully integrate trauma-engaged practices into classroom instruction. Continuing support could include strategically disseminating the Trauma-Engaged Schools resources; developing and conducting trainings, virtually and in person, across the state; and providing coaching and technical assistance to address needs at particular schools and districts, among other measures.

AK DEED and its partners might want to prioritize efforts to increase the visibility and use of the Trauma-Engaged Schools resources. Despite the collaborative development and grassroots dissemination of the Alaska-specific Trauma-Engaged Schools resources, many schools were unaware of or were not using the resources. This gap is especially important given this study’s finding that awareness and use of the Trauma-Engaged Schools resources are associated with higher implementation. This clear association suggests that other states, districts, and schools seeking to introduce or support the use of trauma-engaged practices may want to ensure that educators have access to and are supported in using relevant resources.

Interviews revealed several ways to make the Trauma-Engaged Schools resources more visible and useful in Alaska’s schools, including boosting awareness of the resources, ensuring alignment with other initiatives, and providing guidance on how to translate Trauma-Engaged Schools concepts into classroom interactions. Building awareness of the Trauma-Engaged Schools resources could motivate more educators to access the materials and develop a deeper understanding of trauma-engaged practices.

To encourage greater use of the Trauma-Engaged Schools resources, AK DEED and its partners could improve the alignment between the Trauma-Engaged Schools resources and other high-priority initiatives such as the Alaska Reads Act's focus on reading among preK-grade 3 students. Interviewees suggested that applying a trauma-engaged lens to visioning and plan development for the Alaska Reads Act's professional learning and resources would benefit both initiatives. Interviewees suggested a need for resources that translate the concepts of the Trauma-Engaged Schools resources into concrete classroom activities. Substantial efforts are required for educators to build a conceptual understanding of each of the 11 components of the Trauma-Engaged Schools resources and to translate them into practice. AK DEED and others interested in supporting implementation of trauma-engaged practices could focus on identifying mechanisms to align trauma-engaged practices and current priorities and on developing Trauma-Engaged Schools resources that can be directly implemented in a classroom setting, such as lesson plans and activities.

As AK DEED considers how to support schools, it could conceptualize trauma-engaged practices that are responsive to students universally while also supporting students at increased risk of adverse outcomes. The use of trauma-engaged practices appears to be relevant and feasible in schools with varied characteristics and is not limited to certain types of schools. Examination of the associations between school implementation level and school characteristics suggests that schools of varied size, locale, and student composition can achieve similar levels of implementation. However, schools with a larger population of students in the foster care system may have a more pressing need to integrate trauma-engaged practices.

Other states and organizations aiming to support schools' use of trauma-engaged practices could develop strategies to address buy-in, training, funding, and partnerships. Interviewees described contextual factors that they believe facilitate implementation. These factors include buy-in and support from district and school leaders, staff, families, and community members and investments in trauma-engaged practices, including the addition of support staff, training, funding, and partnerships with community organizations and families. AK DEED can use the findings from this study to develop recommendations to support districts and schools in increasing buy-in, ensuring that staff receive high-quality training, allocating more funding, and cultivating strong partnerships to support implementation.

Implementing trauma-engaged practices could support school climate outcomes, particularly by building relationships and improving cultural connectedness, which may in turn improve attendance and academic outcomes for students. School climate outcomes are an important precursor to many of the administrative outcomes examined in this study. Theoretically, schools could increase student attendance and reduce reliance on disciplinary measures by fostering an environment in which students feel that they are surrounded by peers and adults who care about them and that their school understands and supports their culture, which could also support higher academic performance and graduation rates (Maxwell et al., 2017). For example, a meta-analysis found that student-teacher relationships are associated with greater school engagement and achievement (Roorda et al., 2011). Similarly, a systematic review of culturally responsive pedagogy found it to be associated with academic achievement and student involvement in learning (Wah & Nasri, 2019). The finding that students in schools with higher implementation of trauma-engaged practices felt greater cultural connectedness is particularly salient in the context of research suggesting an association between culturally relevant education and such student outcomes as academic achievement and student motivation (Aronson & Laughter, 2016).

The early evidence gathered through this study suggests that there may be value in a more rigorous exploration of the impact of trauma-engaged practices on student outcomes, especially considering that AK DEED released the framework and resources in 2019, shortly before the Covid-19 pandemic emerged. The pandemic had a profound impact on school functioning and student outcomes. By the time a future study is conducted, schools will have had a longer interval to fully integrate trauma-engaged practices. Further, future work could incorporate additional mechanisms to assess implementation and form a comparison group to explore the impact of trauma-engaged practices more precisely.

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