

**Get in Rhithm: Increasing Structured Identification of Student Wellness Needs and
Improving Student Availability for Learning Through Social-Emotional Intervention**

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Abstract

Symptoms of mental health disorders frequently appear in students within the school setting. However, interventions focusing on identifying early signs of mental health needs and providing school personnel with critical knowledge to take action are unclear. Factors associated with identifying early signs of mental health needs include having a structured system that recognizes at-risk students and increases student availability for learning. Previous research demonstrates a need for unique programming that outlines an organized and well-thought-out delivery of student mental health support in the education setting. The purpose of this white paper is to examine the problematic factors school systems currently face in regards to providing students with well-being services and how the Rhithm, Inc. application can support school system gaps through an educational partnership. A review of empirical literature examines current educational social-emotional programming and intervention trends. Findings from the literature review support Rhithm, Inc.'s ability to meet the social-emotional programming demands placed on school districts nationwide.

Keywords: mental health, school mental health, school mental health policy, social-emotional learning, mental health intervention, school services.

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Executive Summary

This white paper focuses on demonstrating how the education technology application put forth by Rhithm, Inc. has the potential to meet the social-emotional needs of school districts nationwide. An empirical literature review examines two primary factors related to social-emotional needs currently plaguing school systems. Factors include a call to action by the U.S. Department of Education for schools to have a structured approach to recognize students at-risk for mental distress and plans to increase student availability for learning. A solution outlining how Rhithm, Inc. can help meet the well-being goals put forth by the U.S. Department of Education accompanies the findings.

Problem of Practice

Approximately one in six American youths aged 6-17 experience signs or symptoms associated with a mental health disorder each year (National Alliance on Mental Illness, 2021). A mental health disorder is "a mental, behavioral, or emotional disorder resulting in serious functional impairment, which substantially interferes with or limits one or more major life activities" (National Institutes of Health, 2016, p. 1). The fallout from the COVID-19 pandemic demonstrates a rise in youth mental health needs, with more than 25% of U.S. parents reporting increasing concerns with their child's mental health between March and June 2020 (Patrick et al., 2020). With symptoms of mental health disorders regularly appearing in students within the school setting, interventions focused on identifying early signs of mental health needs are critical before student academic progress, and overall well-being is irrevocably impacted (Eccleston, 2021; Kessler et al., 2005; Ohrt et al., 2020). Having a strategic system to address student mental health needs in the school setting is imperative to account for the link between student academic

achievement and overall well-being (Borntrager & Lyon, 2015). The Committee on School Health (2004) expresses how improving coordination of current service limitations through educational partnerships can prevent significant mental health concerns from taking place later in students' lives. Additionally, Nabors and Reynolds (2000) discuss reports demonstrating how supports within the school setting in the form of unique programming tailored towards mental health awareness reduced the stigma surrounding students' willingness to seek help for mental health concerns and overall helped to improve academic outcomes. Factors associated with identifying early signs of mental health needs include having a structured system that recognizes at-risk students and increases student availability for learning (Eccleston, 2021).

Factors Associated with Identifying Early Signs of Mental Health Needs

Structured Identification System

Beyond research discussing the importance of maintaining well-structured classrooms to support students facing mental health needs, there is little data to offer school systems that clearly outline an organized and well-thought-out delivery of student mental health supports. Korinek (2021) delineates how all students require safe classrooms that aid in academic and social-emotional wellness and expresses how teachers must attend to the classroom environment to ensure that students have a healthy educational setting. However, guidelines on how schools should best collect student wellness data, collaborate across school settings, inform teachers on how to best support students experiencing emotional distress, and establish a healthy classroom environment are unclear. Challenges facing schools' ability to address student mental health needs properly include ineffective implementation of practices. Limitations associated with insufficient training, limited resources, decreased availability, and environmental challenges

make delivering social-emotional school services difficult (U.S. Department of Education, 2021). Furthermore, schools face a fragmented delivery system of care that often works in isolation from one another. Without a transparent, collaborative approach, teachers, counselors, school mental health providers, and administrators are regularly unaware of the concerns individual students are facing (Adelman & Taylor, 2021).

To ensure students receive access to social-emotional supports critical to their academic and personal achievement, the U.S. Department of Education (2021) recommends establishing an integrated framework that includes educational, social-emotional, and behavioral health supports for all students. Part of the framework outlined by the U.S. Department of Education (2021) includes developing a program that prioritizes student schedules to include instruction and support around social-emotional and behavioral health learning. Additionally, the U.S. Department of Education (2021) recommends having a system that regularly collects and analyzes student and staff mental health needs to ensure that proactive decisions surrounding school mental health priorities frequently occur.

Programming to Increase Student Availability for Learning

Self-regulation intervention is a growing concept among school settings to teach students how taking responsibility for their achievement can result in ongoing academic success (Le & Wolfe, 2013). Le and Wolfe (2013, p. 37) define self-regulation as "adapting and controlling one's own behavior under a range of conditions and circumstance" (adapted from Toshalis & Nakkula, 2012). Self-regulation is a metacognitive skill that allows students to set goals and evaluate their progress throughout their learning journey (Zimmerman, 1990). Research from Le and Wolfe (2013) suggests that students engaged in self-regulated learning are more capable of

examining the validity of their learning methods and adjusting to their observations by alternating their behavior. A quasi-experimental design examining the impact of self-regulation skills on six-year-olds found a statistically significant difference in participants' ability to self-regulate their emotions compared to the control group (Liman & Tepeli, 2019). Additionally, interventions addressing self-regulation demonstrate a positive effect in supporting students with attention-deficit/ hyperactivity disorder (Reid et al., 2005), learning impairments (Reid, 1996), and autism spectrum disorder (Nowell et al., 2019).

Forms of self-regulation intervention proven to be successful include the following: (a) allowing for the use of concrete terminology and visuals to make abstract emotion identification and regulation concepts comprehensible for children; (b) releasing negative feelings/energy through the use of a fidget tool; (c) visual guidance on diaphragmatic breathing; (d) step-by-step visual guidance on how to contract and relax the body to ease tension; (e) the use of simple yoga poses; (e) using writing and drawing as a method of expression for thoughts and feelings; and (f) the use of positive imagery to aid children in shifting their thought patterns (Nowell et al., 2019). Furthermore, research shows that students with strong self-regulation skills are less likely to engage in substance use, introverted behavior, irregular eating habits, and obesity (Herman & Polivy, 2011; Posner & Rothbart, 2009). Conversely, students without exposure to self-regulation skills are more prone to substance use, alcohol abuse, eating disorders, fighting, and impaired academic outcomes (Tangney et al., 2004).

Solutions Associated with Identifying Early Signs of Mental Health Needs

Rhithm, Inc.'s application framework includes specific programming to meet the needs of the current educational landscape. Rhithm, Inc. strives to be mission-driven by providing an

efficient tool that will allow educators to elevate the next generation of humanity more effectively. Rhithm, Inc. works to meet its mission by attending to the human side of students and teachers through the application of mental health, social-emotional, and well-being programs designed to meet the needs of all district and state educational systems (Rhithm, Inc., 2021).

Structured Identification System

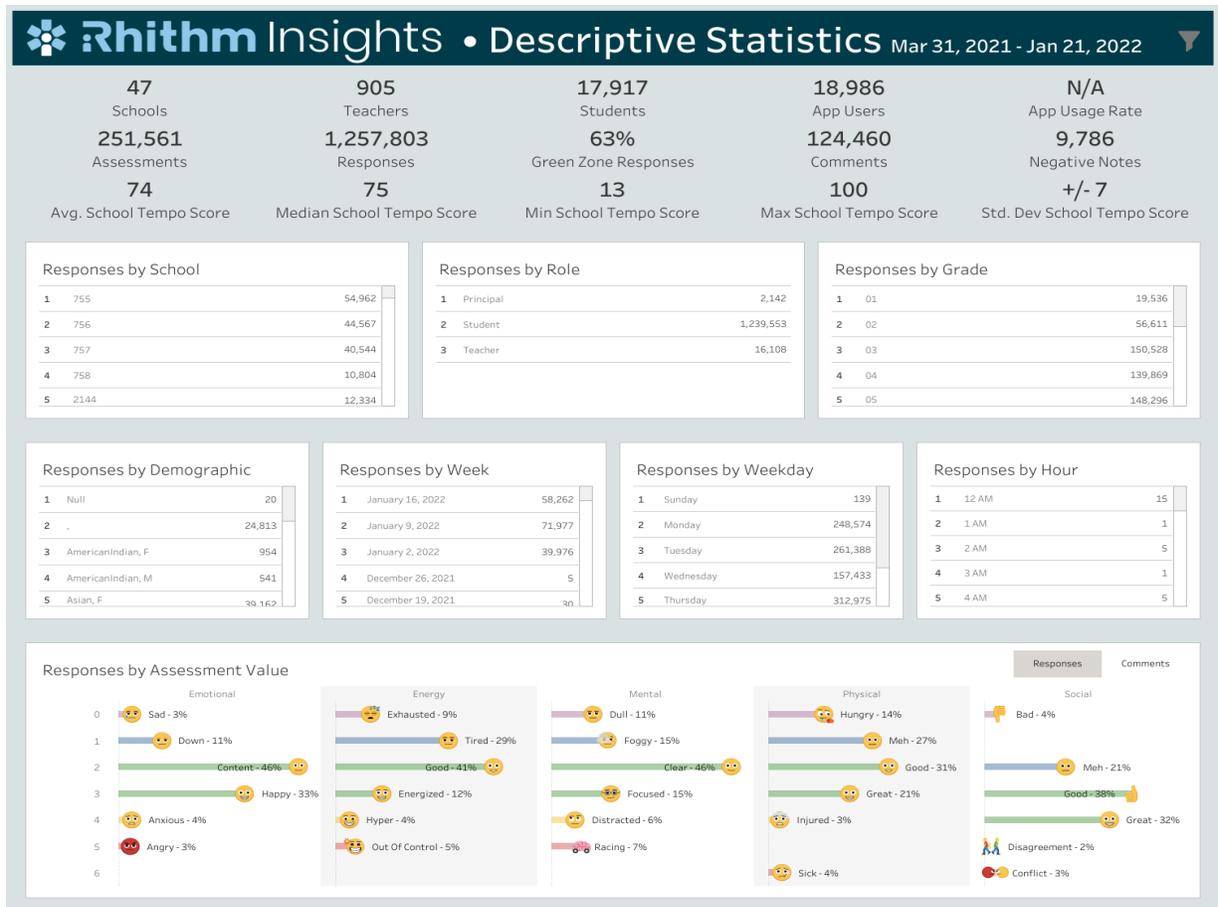
Rhithm, Inc.'s application framework is multifaceted and designed to meet the needs of all school systems. Not only does the Rhithm, Inc.'s application resolve a fragmented delivery of service model, but its design specifically promotes collaboration among school personnel working to support individual student and whole school needs. The Rhithm, Inc. application seamlessly aligns with the U.S. Department of Education (2021) recommendations for establishing an integrated social-emotional framework by using advanced technology to collect and analyze student mental health data regularly. Additionally, schools can utilize the Rhithm, Inc. application to support school staff well-being by providing opportunities for professionals to interact with the Rhithm, Inc. application and provide essential data to school leaders about the overall well-being of students and staff members. Data is collected using a series of five questions related to mood, energy, emotion, physical body, and social life, using a simple to understand emoji rating system. Once data has been provided to the application, a video created by licensed clinicians is populated in relation to the responses submitted by the user and provides self-regulation guidance using various techniques such as visualization, deep breathing, stretching, and affirmations.

Furthermore, Rhithm, Inc.'s most powerful tool aligning with the U.S. Department of Education (2021) recommendations is the data collected by the application. In addition to

teachers tracking and receiving notifications alerting them to students that may require additional support, Rhithm Insights™, the application's data platform, provides administrators and school district personnel with real-time student well-being metrics. School districts can examine the metrics further by reviewing specific schools, grade levels, and/or demographic information. Additionally, schools can view trends in student well-being over time and see the impact of long-term use of the application has on overall student well-being. One powerful insight provided to school teams is the descriptive statistics view (see Figure 1).

Figure 1

Rhithm Insights™ Descriptive Statistics



Note: This example demonstrates weekly Rhithm Insights™ data.

Data occurring throughout the week via the Rhithm, Inc. application can show responses by schools, roles, grade level, demographics, and time. Additionally, school personnel can view the overall climate of students by reviewing the responses by assessment value data. Understanding the current climate of an individual school allows for swift and immediate intervention actions.

Programming to Increase Student Availability for Learning

Licensed clinicians oversee media content creation within the Rhithm, Inc. application to provide students with the self-regulation skills necessary to succeed academically and social-emotionally. For example, Le and Wolfe (2013) discuss how one of the most important findings of their research is the positive impact self-regulation skills have on student learning. Furthermore, Le and Wolfe's (2013) research suggests the area of the brain most impacted by student stressors is the prefrontal cortex, where impulses and emotions are regulated. Given that stressors can come from many experiences, such as trauma, abuse, neglect, and/or mental illness, Le and Wolfe (2013) report that students exposed to stressors often have difficulty attending to academic tasks. Furthermore, students exposed to ongoing stressors frequently display brain development concerns that can impact critical executive functions such as working memory, self-monitoring, emotional regulation, and problem-solving. However, exposure to self-regulation techniques has proven to help students cope with ongoing stressors and reduce the adverse impact of stress on the brain (Le & Wolfe, 2013).

The Rhithm, Inc. application is in alignment with key qualities of successful self-regulation intervention as discussed by Nowell et al. (2019), including providing concrete language and visuals to help students identify and express their emotions via the simple emoji wellness check-in, and through presenting students with differentiated self-regulation strategies

that support the brain's prefrontal cortex regulation. A team of licensed clinical professionals continually develops short video segments that provide students with activities highlighted by Nowell et al. (2019) such as deep breathing, visualization, and stretching that match the needs indicated by their Rhithm, Inc. assessment. Based on data outcomes, teachers and school personnel can track overall trends associated with student responses and make recommendations for individual students and/or classes (see Figure 2). The data collected by the Rhithm, Inc. application allows for systematic climate analysis and provides school districts with the ability to respond quickly to schools demonstrating increasing or ongoing wellness concerns.

Figure 2

Emoji Metrics



Additionally, feedback from teachers, school counselors, social-emotional learning coordinators, and administrators' was analyzed using a qualitative method of two coding cycles to identify commonalities among participants' responses. Of the 21 feedback responses, with

multiple statements falling into more than one category, 85% of respondents expressed gratitude, praise, love, and/or excitement for the Rhithm application, while 52% of respondents noted the application to be informative or eye-opening to the needs of their students, and 38% of respondents mentioning the Rhithm application to be a much-needed tool in the education setting.

Conclusion

In conclusion, Rhithm, Inc's application is an easy-to-use mental health wellness check-in tool that allows educators to proactively shape the culture of a classroom, school, or district at any time in the instructional period. In less than three minutes each day, educators will have the information to determine how students are mentally, socially, physically, and emotionally and can proactively respond before an incident manifests in the classroom. The Rhithm, Inc. algorithm provides differentiated short K-12 aligned videos written by licensed clinicians using evidenced-based strategies to help students self-regulate immediately after taking the five-question emoji-based rating system. With concerns related to mental health, learning loss, and the achievement gap increasing due to learning inconsistency associated with the COVID-19 pandemic, Rhithm, Inc. provides a solution that is less intrusive on instructional time. Rhithm, Inc.'s application allows teachers to rapidly check in on student well-being while simultaneously ensuring their focus remains on supporting learning loss and closing the achievement gap.

Rhithm, Inc. uniquely serves students, whether in person or virtually, allowing districts to keep a pulse on students even within a remote setting. The high-level data reporting tool Rhithm Insights™ also enables administrators and school districts to make data-driven decisions for all

students in real-time and ensures students do not fall through the cracks. Furthermore, Rhithm, Inc. eliminates the fragmented delivery of care discussed by the U.S. Department of Education (2021) by aiding in identifying students in crisis and ensuring that all responsible school personnel can access student wellness data, collaborate and coordinate intervention internally and externally.

Rhithm, Inc.'s unique design aids schools in ensuring that students are available for learning by supporting overall mental wellness. School personnel gain a unique opportunity to truly get to know and account for the mental health of every student in their charge. By accessing the Rhithm, Inc. application, school leaders can take the guesswork out of determining the overall student climate and have access to evidence-based resources that support student learning and well-being. By ensuring that student wellness is a primary priority, schools will be able to safeguard student learning by creating a supportive environment that promotes student availability for learning every day.

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