Evaluation of Panorama Platform Use and Perceptions of Effectiveness

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Executive Summary

This evaluation explores the usage and perceived effectiveness of the Panorama platform, an Early Warning System (EWS) tool, recently implemented in Utah public schools. Early Warning Systems utilize student data to identify students who need additional support, assign interventions, and monitor their progress. Ideally, such systems are implemented within team contexts that include educators, administrators, and student support professionals who use data to focus on key indicators like attendance, behavior, and academic performance.

Data tools, such as Panorama, can play a critical role in EWS implementation by aggregating student data across a variety of metrics and presenting them in data dashboards. Panorama can track math, literacy, behavior, and Social Emotional Learning (SEL) indicators to identify students who need additional support. The platform can recommend interventions and it provides opportunities to track interventions across efforts and indicators.

Since 2017, use of the Panorama platform in Utah's public schools has increased from an initial pilot that included 15 schools, to an expanded pilot program that now includes 325 schools. Expanded interest in, and use of, the platform has prompted the need for an initial evaluation of its use. This evaluation used data collected from focus groups and a survey to answer two evaluation questions. Below are the evaluation questions and selected key findings. Considerations for improvement are included in the full evaluation report.

Evaluation Question 1: How did LEA and school staff members use the Panorama platform?

Frequency and reasons for use

- The platform may be under-utilized, with 57% of survey respondents reporting that they used it once a month or less.
- Focus group results suggested that popular reasons for Panorama use included identifying students who needed support, to track attendance and behavioral issues, and to access SEL survey data.
- Platform users reported goals for using Panorama that included monitoring student performance by tracking indicators such as academic performance, attendance, behavior, and SEL.
- Panorama users noted the value of accessing multiple sources of student data in one place, which reportedly made it easier to share data with parents and to communicate and collaborate across departments.

Teachers' use of Panorama

- Survey results suggested that teachers were the least frequent platform users compared to counselors, psychologists, social workers, and school administrators.
- In focus groups, some teachers explained that that they were required to use multiple programs to input and/or access student data, and that the Panorama platform overlapped with other data sources, creating additional work and redundancies.

- The lack of integration and potential redundancy across data systems was reported as a problem and a barrier to use.
- Some users expressed a need for additional training on how to use the platform.

SEL Survey Data

- Panorama users reported accessing SEL data as a popular reason for using the platform.
- Many users reportedly found access to SEL data to be a unique and valuable feature.
- The SEL data also received criticism that SEL survey questions were not well aligned with third to sixth graders' vocabulary and reading comprehension level. Thus, some users questioned the quality of SEL survey questions.

EWS Meetings

- According to survey results, about half of respondents participated in some form of EWS team meeting(s), most of which met relatively infrequently.
- Those who participated in meetings expressed the value of working across roles and departments within their schools.
- Meeting attendees reportedly worked together to identify students who needed help, provided timely interventions, tracked results of interventions, discussed student performance among student groups, and examined data for individual students.

Evaluation Question 2: What is the perceived effectiveness of the Panorama platform?

Effectiveness

- More than half of respondents indicated that the platform was *effective* or *very effective* for identifying students who needed support, assigning interventions, tracking progress, and building a community of data informed educators.
- Well over half of users were reportedly satisfied or very satisfied with the platform overall.
- Focus group participants described Panorama as effective for using data to inform early interventions, following trends in student performance, identifying students' needs, and sharing information across departments and roles within schools.
- Users liked the ease of use, appreciated having access to information in one place, and celebrated the variety of features available within the platform.

Lack of Effectiveness

- Some users reportedly distrusted the accuracy of academic data and/or distrusted the quality of SEL data.
- Having access to multiple sources of student data reportedly created redundancies for some users.
- Suggestions for improvements included providing more training, integrating Panorama with other Student Information Systems (SIS), and improving the quality of SEL data.

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Introduction

Although the Utah public high school student graduation rate increased from 84% in 2015 to 88% in 2022, approximately one in eight students still failed to graduate. Students from historically disadvantaged groups were particularly affected, with graduation rates for American Indian/Alaska Native (78%), Black (79%), and Hispanic (81%) students remaining below the Utah state average (https://www.schools.utah.gov/data). In response, Local Education Agencies (LEA) and schools have implemented various strategies and interventions that they hope will increase graduation rates for all students. One of those strategies has been to implement Early Warning Systems (EWS).

According to the Association of Institutional Research (AIR), "Early Warning Systems use individual student data to generate indicators of on-track status for graduation, including attendance, behavior, and course performance" (Fazelle & Nagel, 2015, p. 5). Practitioner guides for EWS implementation recommend that educators, administrators, and student support professionals form teams and utilize data to identify students who need additional support, assign interventions, and monitor students' progress (Fazelle & Nagel, 2015; O'Cummings & Therriault, 2015; Therriault et al., 2010).

Although there are many types of EWS utilized by school districts across the U.S., relatively few empirical studies have investigated the impact of the EWS usage (Frazelle & Nagel, 2015). One possible reason for the lack of previous research is that it is difficult to separate the impact of EWS from other interventions. Another reason for the lack of empirical studies may be the challenge of accounting for and measuring widely varied EWS implementation practices (U.S. Department of Education, 2016).

Models and Best Practices for Implementing EWS

Despite the lack of definitive statements about the overall effectiveness of EWS, reputable research centers have offered models to guide high quality EWS implementation. The National High School Center, a division of AIR, has adopted the Early Warning Intervention and Monitoring System (EWIMS) as a model for EWS implementation. Therriault et al. (2010) described the EWIMS as an ongoing seven-step implementation process for using EWS to improve student outcomes (See Appendix A). The steps are to:

1) Establish roles and responsibilities of the EWS team,
2) Use an early warning data tool,
3) Review the early warning data,
4) Interpret early warning data,
5) Assign and provide interventions,
6) Monitor students and interventions, and
7) Evaluate and refine the early warning process.

Similarly, the National Forum on Education Statistics offered a continuous improvement model for EWS implementation (See Appendix B). Their model focusses on iterative cycles of implementation and offers four steps of:

1) Planning,
2) Implementing,
3) Using, and
4) Evaluating.

The *planning* stage includes forming a team, identifying data and indictors, and developing an analytical approach. *Implementation* and *use* focus on training staff, utilizing data, providing interventions, and monitoring student progress. The *evaluation* step directs users to document stakeholder feedback and identify opportunities to improve EWS implementation (National Forum on Education Statistics, 2018).

A consistent theme across models of EWS is the use of data, often facilitated through tools that increase data accessibility and use. One such tool that Utah LEAs and schools have been utilizing is the Panorama platform. This web-based platform aggregates student data across a variety of metrics and presents them in data dashboards. As an EWS tool, Panorama can track math, literacy, behavior, and SEL indicators to identify students who need additional support. The platform can recommend interventions and provides opportunities to track interventions across efforts and indicators. Interested readers can learn more at their website: https://www.panoramaed.com/.

History Of Panaroma Use in Utah

In response to the passage of Utah H.B.404 in 2017, which "provides for systems to identify students in need of early intervention," 15 schools began piloting use of the Panorama platform. The project ended up in 125 schools from seven school districts. The initial scope of this project was expanded from student attendance, behavior, and coursework data to include academic assessments, social-emotional learning (SEL) indicators, and intervention data.

Since 2018, participating Utah schools have used the Panorama platform as an EWS tool to identify at-risk students, plan interventions to improve student outcomes, and track student progress. By gaining access to real-time trends in student data, educators and student support personnel can identify the first signs that students appear off-track for success and can implement and monitor interventions (USBE internal document: Early Warning System Overview for USBE Board). Given the positive response to the Panorama platform in Utah's schools, the Utah State Board of Education (USBE) submitted a request to the Utah state legislature in 2021 to further expand the EWS pilot program to 325 schools. The request was granted, and the program was expanded.

Expanded interest in, and use of, the platform has prompted the need for an initial evaluation of its use. The purpose of this evaluation was to explore how the Panorama platform is being used in public schools and to determine perceptions of its effectiveness. The following questions guided the evaluation.

1. How did LEA and school staff members use the Panorama platform?
2. What was the perceived effectiveness of the Panorama platform?

Methodology

To answer the evaluation questions, we used data collected from an EWS survey and focus groups. Evaluators created the EWS survey and focus group protocol in response to recommendations from the models noted above. Survey respondents and focus group participants were identified through a list of Panorama users who worked for Utah's LEAs and who had logged in at least once between August 2021 and March 2022.

Focus Groups

A third party conducted the focus groups, which were semi-structured and based on the protocol and questions developed by evaluators (See Appendix C). Facilitators asked focus group participants to discuss their goals and expectations for using the Panorama platform, to describe how they used it, and to discuss their perceptions of its effectiveness. The third-party conducted ten focus groups during the spring of 2022. Each focus group included one to seven participants, with a total of 29 participants in the final focus group data. Focus group data were audio recorded, transcribed, and analyzed via *framework analysis* (Ritchie & Spencer, 1994). This approach involves five key stages:

1. Familiarization: reading transcripts to sketch a picture of conversations and identify major themes.
2. Identity a thematic framework: writing memos in the margin of the text, such as short phrases, ideas, or concepts to develop categories.
3. Indexing: filtering data, highlighting quotes to make comparison both within and between cases.
4. Charting: categorizing quotes under a newly developed thematic content
5. Mapping and interpreting: understanding the individual quotes and associations between them as a whole picture (Ritchie & Spencer, 1994).

This framework allowed evaluators to analyze the focus group data to develop themes that aligned with the evaluation questions, and also accommodated an open-coding format that looked for themes to emerge independent of the evaluation questions (Rabiee, 2004).

EWS Survey

Evaluators emailed the electronic survey to Panorama users and collected data in May and June of 2022. The original contact list included 1,959 users and 511 provided useable survey responses, a 26% response rate. Information about respondents is provided in Figure one, Figure two, Figure three, Table one, and Table two in the results section. The survey gathered information about respondents' roles in their LEAs, their experience, how they used the platform, and their perceptions of its effectiveness. The EWS survey was comprised primarily of multiple-choice questions along with three open-ended questions. We used descriptive statistics such as counts, percentages, and cross tabulation to analyze quantitative survey data and open-coded qualitative data into emergent themes and subthemes.

Results

This section presents results from both the survey and focus group analyses. We include example quotes from focus group discussions and open-ended survey responses. We present quantitative survey results in graphs and tables. Nearly half (49%) of all survey respondents worked in Ogden School District, followed by 22% of respondents who worked in Jordan School District (See Figure 1). Nearly half (48%) of respondents identified themselves as teachers, followed by counselors, psychologists, and social workers who represent 21% of respondents (See Figure 2). Most (65%) had worked in their LEA for more than three years (See Table 1). About one third of respondents had been using Panorama for less than one year (See Table 2). There was a relatively even representation of respondents across grade bands, with 35% serving K-6, 26% serving 7-9, and 26% serving 10-12, and the remainder working across multiple grade bands (See Figure 3). We did not collect similar information from focus group participants. However, data analyses suggested that focus group participants included teachers, principals, counselors, coaches, psychologists, social workers, instructional facilitators, and other support roles.

Figure 1. Respondents by LEA

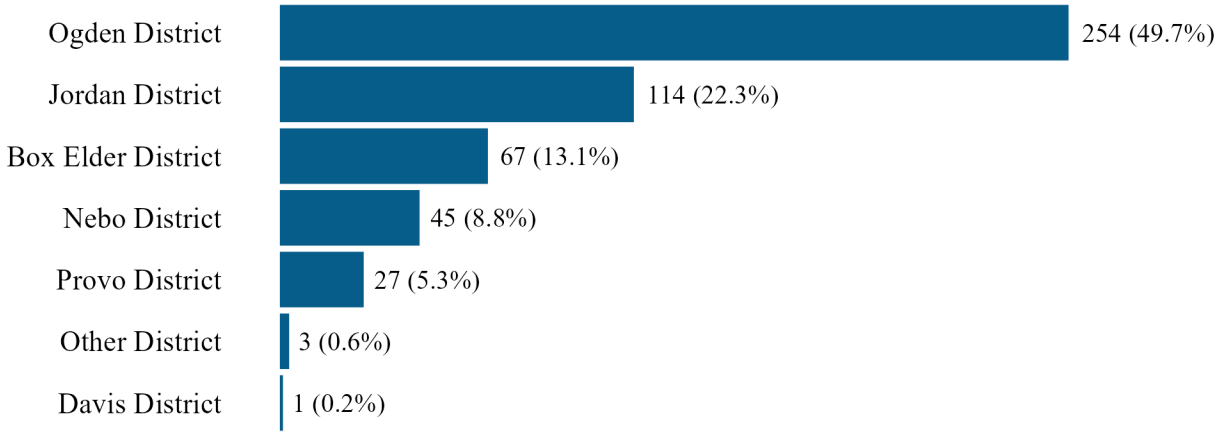


Figure 2. Percent of survey respondents by role

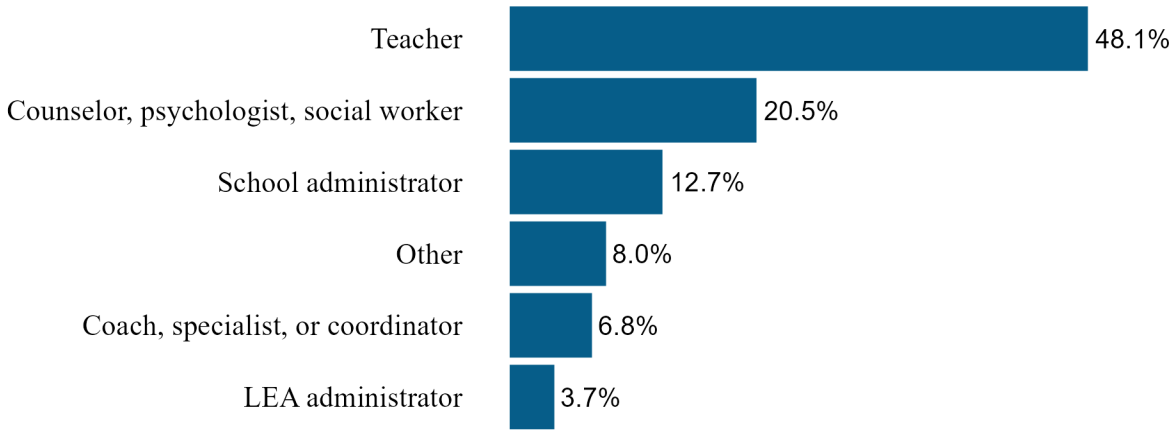


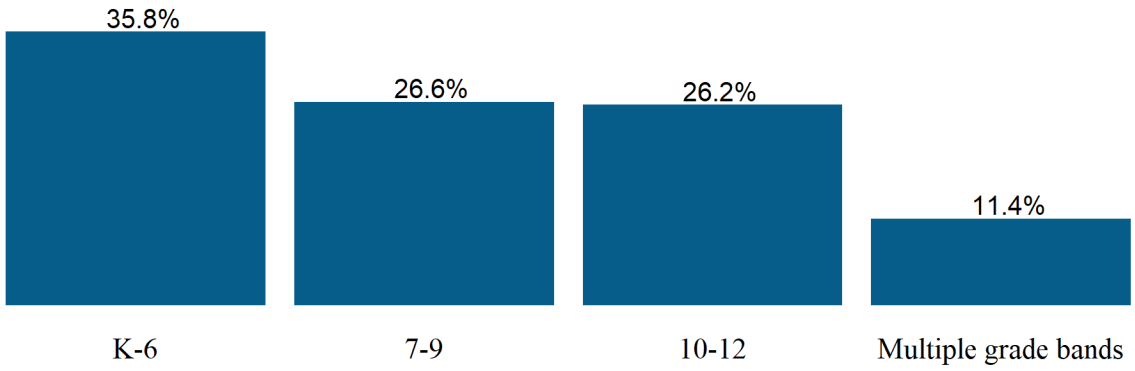
Table 1. Years of experience working in their current LEA

Years of Experience	Count	Percent
Less than 1 year	54	10.6%
1-3 years	124	24.3%
More than 3 years	333	65.2%

Table 2. Years of experience of using Panorama

Years of Experience using Panorama	Count	percent
Less than 1 year	160	31.3%
1-3 years	255	49.9%
More than 3 years	96	18.8%

Figure 3. Percent of survey respondents by grade band



Evaluation Question One: How did LEA and School Staff Members Use the Panorama platform?

Description of Panorama Use

Panorama users identified their goals for using Panorama in both focus group and survey data. In focus groups, participants described multiple goals that largely focused on closely monitoring or tracking student performance. They explained how they used indicators such as academic performance, attendance, behavior, and SEL survey results to identify students who might be at risk.

> *Every week I go in and put what particular topic was discussed, what skill was practiced, how the student responded to that skill. … to see incrementally, week by week, how successful they [students] are in attending and participating. So, we collect that data and also so then the next year we can see what was already implemented the prior year (Focus group).*

> *Diving into those Panorama surveys and targeting places where students are identifying that they need more social-emotional help, so pulling them into some of our social skills groups to give them that help and support that they're identifying as well (Focus group).*

> *I tried to look at their attendance and their social emotional well-being. You know any kind of behavioral concerns or academic concerns. And just try to sort from the ones that are the most at-risk to the ones that are not so (Focus group).*

> *Usually, the counselors know about those students but it's good just to monitor who is kind of getting in trouble along with their attendance and grades. And that narrows the list down pretty, you know, down to even just 3 to 5 students sometimes that are kind of on our high warning list (Focus group).*

According to some focus group participants and survey respondents, Panaroma allowed them to access several types of student data in one place, which in turn made it easier for them to share and discuss student data with parents. In addition to using the platform to inform parents, some Panorama users also used it as a tool to communicate and collaborate across departments within schools. For example, some respondents explained how they documented student needs and progress for parents. Others noted the value of having a common place for staff members to collaborate or communicate across roles school wide.

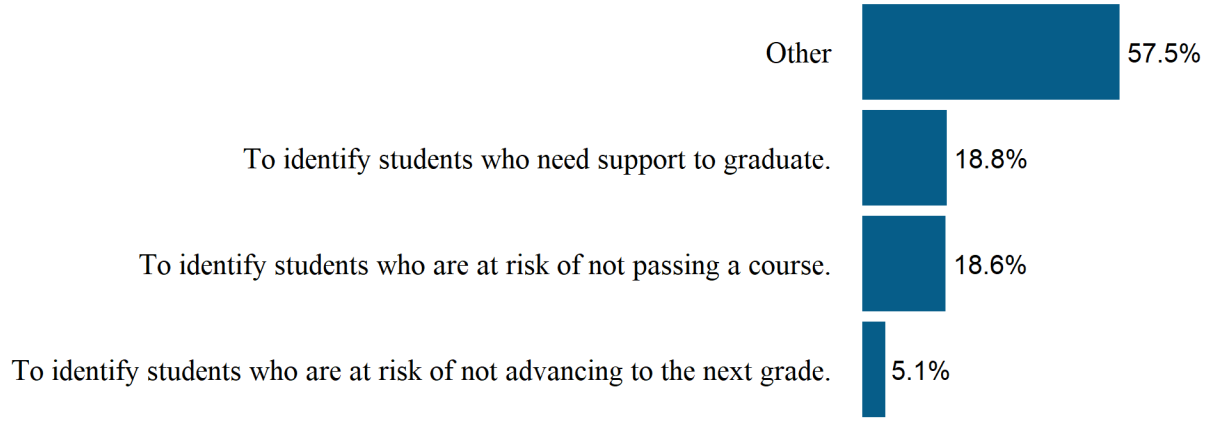
> *You don't always see the exact same behaviors at home because we're asking them to do different tasks here at school. So when we can give parents data, it really helps them identify, okay, like, there is a problem. How can I best support my students. And in the end, like, when they really have that buy-in and concern and they see that data, they're more effective in helping their student as well (Focus group).*

> *….my expectations that I use it to document, like, the one place where we can put everything that we know or are doing as a school (Focus group).*

> *We also use it as a communication system for counselors to track interventions on individual students. (i.e., A student at risk may be meeting with a teacher, counselor, social worker and administrator. It's a great way to see what interventions have been attempted by each of the educators listed so we are not all doing the same thing (Survey).*

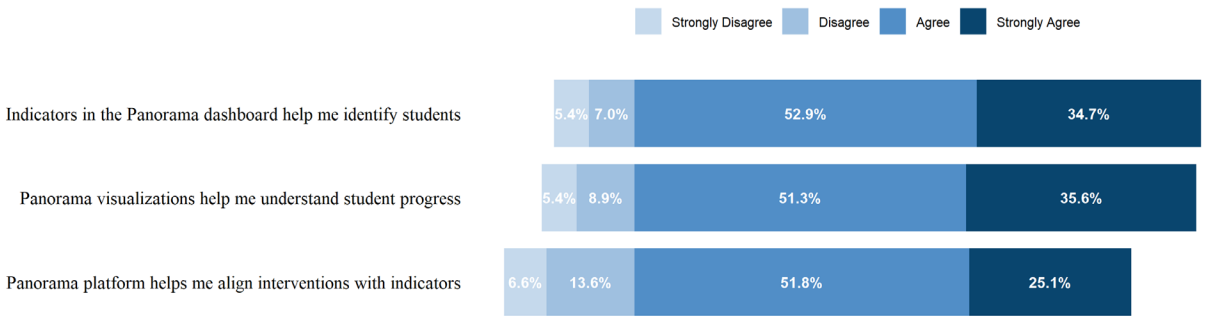
The survey asked respondents to indicate their primary reasons for using the platform (Figure 4). More than half of respondents (58%, 294) indicated that their primary reason was something *other* than identifying students who needed support to graduate, who were at risk of not passing a course, or at risk of not advancing to the next grade. Respondents were provided with an open text box to identify their *other* reasons for using the platform. Top responses included using Panorama for accessing SEL survey data (99), tracking attendance (42), and monitoring behavioral issues (32). Other primary reasons included using the tool to document student events and communicate across the school and with parents (see quotes above). Some respondents indicated that they used the tool merely because they were asked to, while others noted that they used it to view academic data and to identify or monitor students who may be at risk or otherwise in need of support.

Figure 4. Primary reason for using the Panorama platform



In addition to reasons for using Panorama, the survey also asked respondents to indicate the extent to which the platform helped them identify students who needed additional support, monitor student progress, and align interventions with indicators. Figure 5 shows that 88% *agreed* or *strongly agreed* that the platform helped them identify students who needed additional support, 87% *agreed* or *strongly agreed* that it helped them understand student progress, and 77% *agreed* or *strongly agreed* that it helped them align interventions with indicators.

Figure 5. Extent of agreement with the Panorama platform functions



The focus group discussions and survey results displayed above provide insights into platform users' goals and how they leveraged Panorama to accomplish their goals. Additionally, frequency of Panorama use provides another important indicator of how Panorama users engaged with the platform.

Frequency of Panorama Use

According to survey responses, 43% used the platform at least twice a month (Figure 6). After breaking down the frequency of use into roles, Figure 7 showed that the most frequent users were counselors, psychologists, social workers, 60% of whom were using the platform at least twice a month, followed by school administrators, 53% of whom were using the platform at least twice a month. In contrast, 24% of teachers reported using Panorama at least twice a month.

Figure 6. Frequency of Panorama use

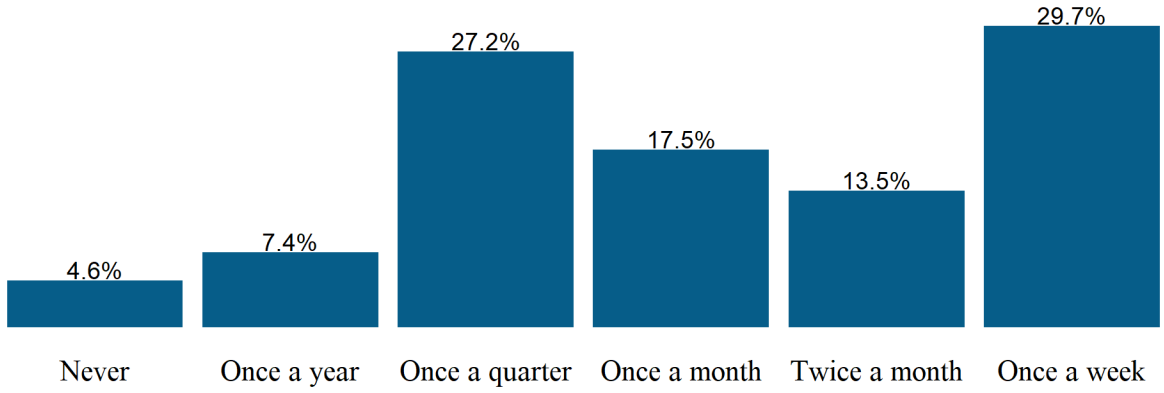
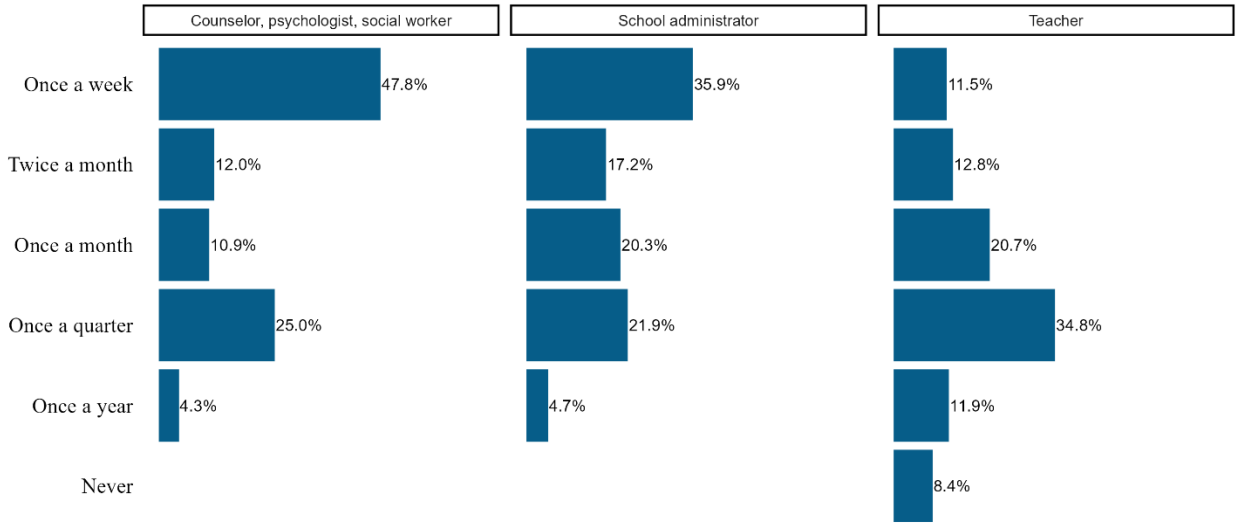


Figure 7. Frequency of Panorama use by user role



Focus group participants offered explanations for limited use of the platform. They noted that overlap with other student information platforms created extra work and redundancies.

> *I would also say like it would be really nice if it talked with some of our other programs a little bit better, so that I'm not having to enter information across multiple programs, because that just is very time consuming and tedious and really turns me off from wanting to use yet one more program (Focus group).*
>
> *Now we have two systems, so we have to ignore one or copy and paste. That's something that gives me a little--ugh--we want to integrate (Focus group).*
>
> *It's a district required program, but both. Like I have to track, a lot of the same information on our IEP programs and all districts have their own individual IEP programs and it's just one more program to use (Focus group).*

While we do not know the extent to which such redundancies were relevant for all Panorama users, it was the case for some.

Team Use of Panorama

Beside individual use of the EWS, literature emphasizes (Frazelle & Nagel, 2015) that team use is an integral part of effective implementation. Both focus group and survey questions asked users if they had experience attending and participating in Panorama user team meetings. More specifically, we asked about the frequency of meetings and what they did during meetings. Fewer than half (46%) of survey respondents indicated that they had attended a Panorama user team meeting (Table 3). Table 4 showed that attendance at these meetings was infrequent, with 26% meeting once a month or more.

Table 3. Percent of respondents who participated Panorama user teams

Participation in a Panorama user team	Count	percent
Yes, at my school.	161	31.5%
Yes, at my district.	32	6.3%
Yes, at both my school and district.	44	8.6%
No.	274	53.6%

Table 4. Frequency of the Panorama user team meetings

Meeting Frequency	Count	Percent
Never	23	10.6%
Once a year	100	46.3%
Once a quarter	36	16.7%
Once a month	36	16.7%
Twice a month	21	9.7%

Focus group results suggested that meeting participants usually involved diverse roles such as teachers, counselors, administrators, etc. During meetings, attendees discussed performance of student groups and examined data for individual students. Meeting attendees worked together to identify students who needed help, provide timely interventions, and/or track results of interventions. Importantly, these meetings often involved staff members working together across roles and departments across the school.

> *….generally they're [the meetings are] weekly with our all of our counselors, all of our trackers, our attendance secretaries, and the assistant principals are involved and we go over…. (Focus group).*

> *We did create groups at one point and we used it [Panorama] in our students' study team meetings that we meet with the trackers to talk about students that we're concerned about. But that would be a goal as, I guess, to effectively create a group and use, use it implemented with those weekly meetings and us as follow up, you know, to monitor (Focus group).*

> *If I wanted to focus on a particular student group we do that as well, so we'll look at racial minorities, special education status, whether or not they have an IEP, whether or not the student is identified as an English learner, so we can… So Panorama 's really, really helpful to again just aggregate that data down to specific demographic groups that maybe we want to target and focus on (Focus group).*

> *Panorama gives us different kinds of data and pulls data from different places, attendance, behavior, etc. I love how you can see all different types of interventions working with students. When it comes to collaboration, we can actually see that data to make sure that the interventions and outcomes are one goal (Focus group).*

Table 5 showed that during the meetings more than half (62%) of survey respondents reportedly chose indicators for defined goals, and 61% established criteria for identifying students who needed additional support. Nearly half (47%) of meeting attendees reported that they assigned roles and responsibilities to team members and 43% defined goals for student success. Responses from those who indicated that they engaged in *other* activities were widely varied, but many were related to informing future actions to support students by accessing data.

Table 5. Activities for team meetings

Team Activities	Count	Percent
We assigned roles and responsibilities to members in this team.	101	46.8%
We defined goals for student success (e.g., graduating in 3 years, passing a course, etc.).	93	43.1%
We chose indicators for the defined goals (e.g., attendance, behaviors, course performance, etc.).	134	62.0%
We established criteria for identifying students who need additional support (e.g., cutoff scores for tests, # of day absence, etc.).	131	60.6%
Other	39	18.1%

In addition to the group activities mentioned above, survey results captured the topics that users discussed in team meetings. Table 6 showed most users (79%) worked to identify students who needed additional support, 74% monitored student progress, and 63% assigned interventions to students. Fewer (34%) were using the platform to develop reports. This finding aligned with focus group discussions in which one participant indicated they liked the function of running student reports at individual, group, and school levels.

> *One of the things that I like is that you can run those reports, you know kids are struggling academically, kids struggling with attendance, kids struggling with emotional issues and it helps give a snapshot of your school, but more importantly kids that sometimes tend to fall through the cracks (Focus group).*

Table 6. Topics for team meetings

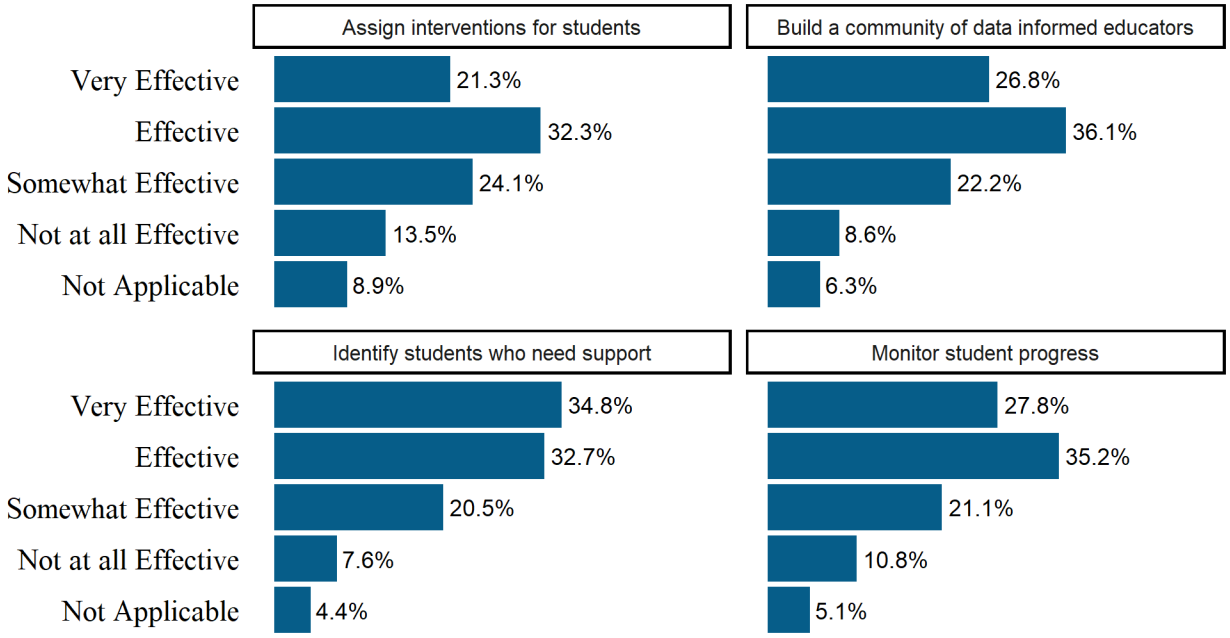
What teams worked on during meetings	Count	Percent
We identify students who need additional support.	170	78.7%
We assign interventions to individual students.	136	63.0%
We monitor students' progress.	159	73.6%
We develop reports from the Panorama platform.	73	33.8%
Other	27	12.5%

Evaluation Question Two: What was the perceived effectiveness of the Panorama platform?

Perceptions of Effectiveness

Most survey respondents indicated that they found the platform at least *somewhat effective* in four areas (Figure 8). Fifty four percent reportedly found Panorama *effective* or *very effective* for assigning interventions for students, 63% for building a community of data informed educators, 68% for identifying students who needed support, and 63% for monitoring student progress.

Figure 8. Perceived effectiveness of the Panorama functions



Focus group discussions largely aligned with survey results. For example, users appreciated the meaningfulness of live data and the ability to track students. They further explained that using Panorama helped them identify students who needed support at an early stage. This included recognizing when students were off track academically or in need of additional support in areas such as attendance, behavior, and SEL.

> *We have that live data which makes it even more meaningful. And we can track even better with it. Also it helps us catch kids earlier or find kids that we might fall through the cracks (Focus group).*
>
> *Diving into those Panorama surveys and targeting places where students are identifying that they need more social-emotional help, so pulling them into some of our social skills groups to give them that help and support that they're identifying as well (Focus group).*
>
> *When I started noticing this downward trend, I was able to group the students into smaller groups in the EWS, and then almost in a sense create several different pathways to addressing what might be the problem. And readjusting as I go along, and I think it's maybe more effective to find different ways to help support students. It's not a one fit all. And watching those trends go up*

> *and then shifting into a different group once they're trending in the right direction. It's because then, it's a different support system to keep them in that direction. So I think it's made me more effective of noticing things and being a better planner for background issues that might arise (Focus group).*

Some focus group participants mentioned the helpfulness of Panorama to evaluate student performance after introducing interventions. For example, in the quotes below a school social worker described monitoring student progression before and after an intervention program. In another case, a focus group participant used the platform to visualize year-to-year trends for student performance.

> *So I've used that to track mainly attendance and behavior. Mainly at the secondary level, to see where my students were before they started working on our at-risk program, compared to the end of the program. So we got their start in dates and just check the data to see if they have improved academically as well as with attendance (Focus group).*

> *….we can look from year to year and see how they scored last year, as opposed to this year (Focus group).*

> *I do like the visual aspect of it that it's easy to see at a quick glance who's failing. I can just do a couple clicks and I can see exactly who's struggling in Science, for example (Focus group).*

Many focus group participants acknowledged the effectiveness of the platform to create a community for sharing student information. Users from across the school community can have a holistic view of student progress and make detailed notes. Using the platform to document interventions and activities helped avoid duplicating efforts across time and staff roles (e.g., teachers, counselors, etc.).

> *I think it's changed our approach because it's a different system. It's helping to create a community. It keeps everyone on their toes. The trackers know that if they don't put their intervention in with this kid, we might accidentally double dip (Focus group).*

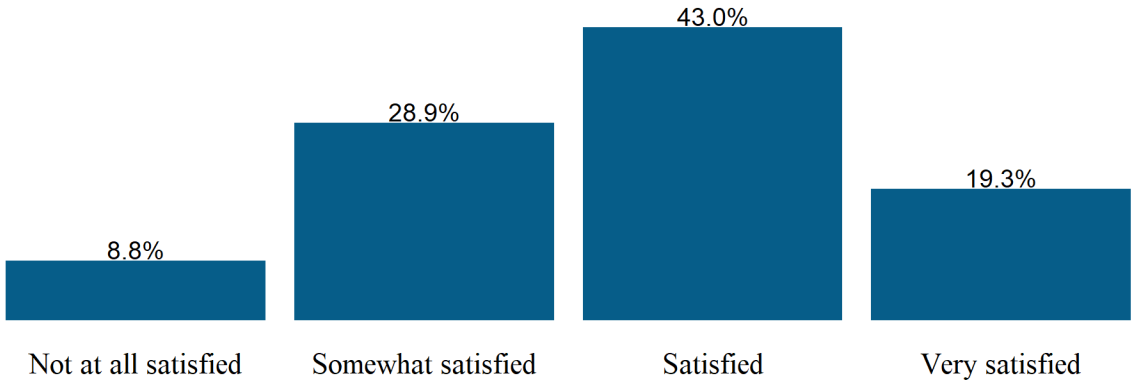
> *And it also allows them as they are tracking data on these students with trackers that we put it in there it just gives them a more clear picture of how that student is really doing with the behavior graphs and everything (Focus group).*

> *As a district social worker, I have used it to gather data for all the schools K through 12 where I'm able to make graphs and charts on attendance and rates and behavior for my students. So that's been helpful (Focus group).*

Perceptions of Satisfaction

Survey respondents also rated their overall satisfaction with the platform. Sixty-two percent indicated that they were *satisfied* or *very satisfied* with the platform (Figure 9). Following the satisfaction rating, the survey provided an opportunity for respondents to provide a rationale for their rating. We organized their responses into two groups and summarized them below.

Figure 9. Overall satisfaction with the Panorama platform



Some reasons for choosing *not at all satisfied* or *somewhat satisfied* included a lack of data accuracy for student data that conflicted with data from student information systems (SIS) or distrust for the accuracy of SEL survey data. In some situations, there may be a lack of integration across data sources within schools, or data sources might be duplicated. Some respondents may have simply favored accessing data through an SIS system. In other cases, respondents expressed dissatisfaction due to a lack of training, and/or they found the platform difficult to use.

> *I feel that data is not as accurate as just receiving it from skyward. It is nice to identify students, but I feel I have to go back to skyward to get the accurate information about the student. I also do not like the rating scale for the SEL survey. On a Likert scale, students that select the middle-of-the-road answers and answer a 3 are identified as super low and are at risk. I don't agree that a middle answer should be considered at risk, so it takes a lot of time to disaggregate the information instead of just being able to glance at the data and get information (Survey).*
>
> *Because I think the data is not totally accurate because the elementary kids do not always understand the [SEL] survey questions. These questions need to be re-written for elementary aged students (Survey).*
>
> *It is just another program in the list of programs I need to use, and because it's honestly not at the top of my priority list. If the features of this program could sync better to other programs or be merged into another program I use (like one of our LMS programs), I'd be more likely to use it (Survey).*
>
> *Reports are hard to figure out. The whole platform is difficult to navigate and hard to use at times (Survey).*
>
> *It's an additional platform that I need to log into to see student data. It would be great to have a single platform that tracks (allows input) everything: attendance, grades, behavior, etc (Survey).*
>
> *I think Panorama doesn't have as much to offer for Elementary schools. We don't use it as often because we aren't able to have all of a student's academic data and behavior isn't synced to Educator's Handbook (Survey).*

> *While Panorama works well for general education students, it is not tailored for students that have special needs. Thus, not making it a useful tool for teachers of students with disabilities (Survey).*

In contrast to the quotes above, some reasons for choosing *satisfied* or *very satisfied*, included perceptions about the platforms ease of use and praise for its features.

> *It is easy to read, interpret, and understand with a small amount of training. it is also easy to add in support and interventions provided for students (Survey).*

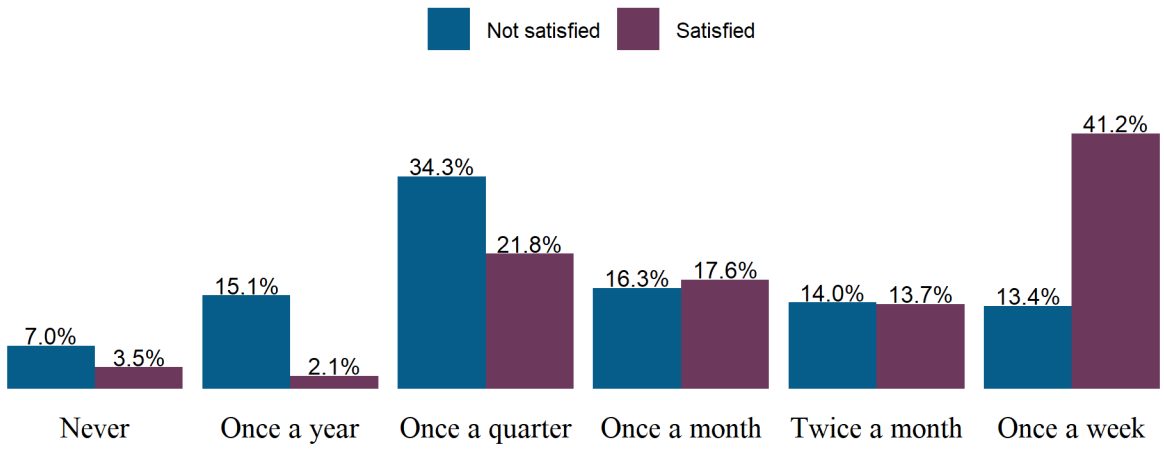
> *It provides information that is helpful and needed for identifying students who need help and support and what has been done to help them so far. It also gives me an idea of things I can do to help them be successful in my class (Survey).*

> *I chose this rating because Panorama has all the information in one system. It is very user friendly and easy to use. (Survey).*

> *Panorama has allowed us to identify student needs based on data that is visible (e.g., grades, attendance, behavior), but it also gives us a glimpse into some of the data that is not easily seen or manifested (e.g., grit, self-efficacy, emotional regulation, etc.). Having multiple data points has provided a better picture for what each student needs in terms of support (Survey).*

Interestingly, among expressions of satisfaction with the platform were also recommendations for improvements. These suggestions were similar to those who did not express satisfaction. For example, satisfied users expressed a need for more training, a need for integration with other student information systems, concerns regarding Panorama survey question quality, refining and adding more functions, etc. It is important to note that some respondents, regardless of their expressed satisfaction, pointed out that their perceptions of satisfaction were based on limited experience using the platform. As Figure 10 shows, satisfaction increased with frequency of use for those who used Panorama at least once a week.

Figure 10. The relationship between the frequency of use and overall satisfaction



Survey respondents had an opportunity to offer additional comments about the effectiveness of the Panorama platform. Although most comments were similar to other open-ended answers in the survey, some additional insights and suggestions are worth noting. For example, some respondents suggested changes to default settings and requested additional flexibility to change some settings. Others suggested that access to Panorama should be granted to more teachers and that the platform could offer additional functionality.

> *Currently the criteria is set at 80% or lower, which is really high. If we are able to change the attendance criteria it will allow us to identify more effective interventions for the students (Survey).*
>
> *I wish the attendance tracking would reset at each quarter. Students may have missed a ton of days at the beginning of the year, and still show low in attendance at the end of the year (Survey).*
>
> *Right now we can identify students based on whether or not they are failing any of their classes, which usually ends up being over half the school. If we could sort students by who has 4 or more Fs, 5 or more Fs, etc. that'd be awesome (Survey).*
>
> *Panorama is limited to administrators, counselors, coaches, and the RTI team at my school. I feel like its use could be so much more effective if there was schoolwide access so all teachers could use intervention trackers (Survey).*
>
> *We need something for teachers to track small behaviors. Only those major incidents are currently documented which gives an inaccurate picture of student needs. We need to see the small behaviors to intervene earlier (Survey).*

Discussion and Conclusion

The combined results of survey and focus group data provide insight into how school staff members utilized the Panorama platform, and the extent to which they considered it effective. This section synthesizes findings in response to the evaluation questions, offers considerations for utilizing the Panorama platform, and concludes with limitations and future evaluations.

How did LEA and school staff members use the Panorama platform?

Frequency and Reasons for Use

Forty-three percent of LEA and school staff members used the platform at least twice a month and 57% reported using the platform once a month or less, suggesting that Panorama may be under-utilized. Focus group results suggested that popular reasons for Panorama use included identifying students who needed support to graduate or pass a course, to track attendance and behavioral issues, and to access SEL survey data. Similarly, EWS survey results showed more than three quarters of respondents reportedly used the platform to identify students who needed additional support, monitor student progress, and align interventions with indicators.

Taken together, this was generally aligned with user's stated goals of monitoring student performance by following indicators such as academic performance, attendance, behavior, and

SEL. In their descriptions of use, they noted the value of accessing multiple sources of student data in one place, which reportedly made it easier to share data with parents and to communicate and collaborate across departments.

Teachers' Use of Panorama

EWS survey results suggested that teachers were the least frequent platform users compared to counselors, psychologists, social workers, and school administrators. According to focus group results, some teachers felt that the platform was not designed for them and that inputting information into Panorama created unnecessary work. Some teachers expressed that they were required to use multiple programs to input and/or access student data, and that the Panorama platform overlapped with other data sources, which created additional work and redundancies. This was a common thread that emerged in both focus group and EWS survey findings. Users reportedly had to import student information that resided in other student information systems into the Panaroma platform, which they found inconvenient and time consuming. The lack of integration and potential redundancy across data systems was reported as a problem and a barrier to use. Some users simply preferred to use other resources to access data. Other users explained that they did not know how to use the platform or how to take advantage of advanced features.

SEL Survey Data

Accessing SEL survey data was identified as a popular reason for using the platform. Many users reportedly found that having access to SEL data was a unique and valuable feature of the Panorama platform. They requested that the SEL data should be extended to include Kindergarten through second grades. The SEL data also received criticism from some users who reportedly felt that SEL survey questions were not well aligned with third to sixth graders' vocabulary and reading comprehension level, and some users questioned the quality of the SEL survey questions.

EWS Meetings

Use of EWS tools, such as Panorama, is best implemented within cross-functional teams (Frazelle & Nagel, 2015). The EWS survey results showed that about half of respondents participated in some form of EWS team meeting(s), most of which met relatively infrequently. Considering the importance of team meetings in EWS models (Davis, et al., 2017; Faria, et al., 2017; Frazelle & Nagel, 2015), this finding reveals a potential opportunity for improvement. Frazelle and Nagel (2015) suggested that personnel from many roles including information technologists, school leaders, district leaders, counselors, data coaches, program coordinators, teachers, and other stakeholders should participate in the meetings, and each should have clearly identified roles and responsibilities. Those who participated in meetings expressed the value of working across roles and departments within their schools. Meeting attendees reportedly worked together to identify students who needed help, provided timely interventions, tracked results of interventions, discussed student performance among student groups, and examined data for individual students.

What was the perceived effectiveness of the Panorama platform?

Effectiveness

The EWS survey ratings suggested a moderate level of perceived effectiveness among platform users, with over half of respondents indicating that the platform was *effective* or *very effective* for identifying students who needed support, assigning interventions, tracking progress, and building a community of data informed educators. Similarly, well over half of users were reportedly *satisfied* or *very satisfied* with the platform overall. In focus group discussions, participants identified using data to inform early interventions, following trends in student performance, and identifying students' needs as effective uses of the platform. They emphasized the value of using the platform to share information across departments and roles within schools. They liked the ease of use, appreciated having access to information in one place, and celebrated the variety of features available within the platform.

Lack of Effectiveness

Focus group participants also discussed reasons for their perceptions regarding the platform's lack of effectiveness. For example, some users distrusted the accuracy of academic data and/or distrusted the quality of SEL data provided by the platform. Some participants noted that having access to multiple sources of student data created redundancies. There was interest in changing default settings and increasing the overall functionality of the platform. They suggested improvements, such as providing more training, integrating Panorama with other SIS systems, and improving the quality of SEL data.

Considerations

In response to the findings discussed above, we offer the following considerations by topic.

Topic	Consideration
Frequency and reasons for use	• Leverage the features and functionality most valued by users. This included identifying students' needs, tracking attendance and behavior, accessing SEL survey data, assigning interventions, monitoring progress, and accessing multiple data sources in one place.
Teachers' use of Panorama	• Further explore and determine the extent to which Panorama introduces additional work for teachers (and other users) and creates redundancies across data systems. Ensure that the platform is integrated seamlessly into current data systems, such that it does not require extra effort to use. • Determine why users in non-teacher roles were the most frequent users. • Ensure that teachers have adequate training to use Panorama, and to use it within an EWS model.
SEL Survey Data	• Recognize that many users view the SEL data as a unique and valuable platform feature. • Communicate to Panorama users the rationale for SEL survey construction, the rigor of the SEL survey's development, the sources used to construct it, and the reliability and validity metrics.

	• While not identified as a need in this evaluation, it might be beneficial to provide training on how to interpret and use SEL data across roles in the schools. • Solicit feedback from Panorama users to better understand how they feel the SEL survey content and structure can be improved.
EWS Meetings	• Promote the importance of utilizing Panorama within teams. Holding regular meetings that include users from many roles within schools will maximize opportunities to identify students' needs, coordinate interventions, monitor progress and support student success.
Effectiveness	• Leverage the value the platform adds by having multiple data sources in one place. • Effectiveness may be amplified when all possible data sources are included, and information is shared across roles within schools.
Lack of Effectiveness	• Establish ongoing, two-way communication with Panaroma users to better understand their needs and concerns. • Consider ideal ways to address potential redundancies across data sources and systems.

Limitations and Future Evaluation

One noteworthy limitation of this evaluation is that the sample may not represent the perceptions of all Panorama users in Utah. In fact, as Figure 1 showed, about 70% of survey respondents were from either Ogden or Jordan school districts, both of which have been recognized on Panaroma's website as successfully utilizing the platform.

This evaluation does not offer empirical evidence on the effectiveness of Panorama as a stand-alone EWS tool or as a tool within an EWS model. In addition to expanding the sample to increase representation, future evaluations might focus on studying implementation of Panorama use, especially within EWS models, and devising methods to determine the extent to which using the platform has an actual impact on student performance.

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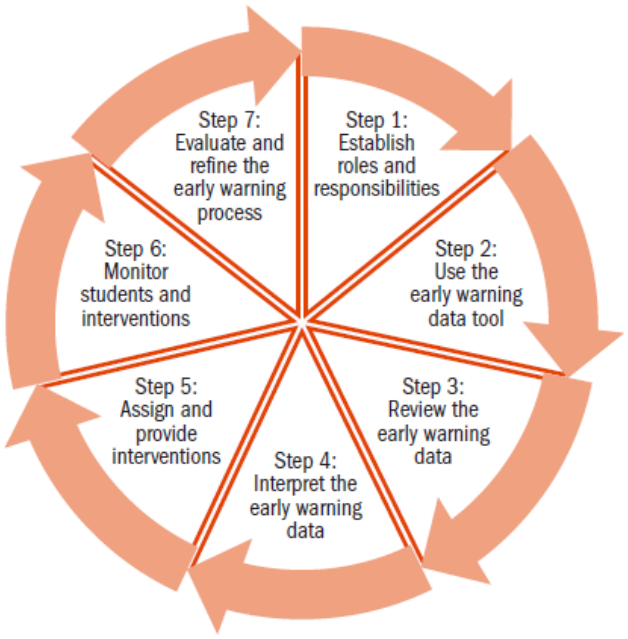
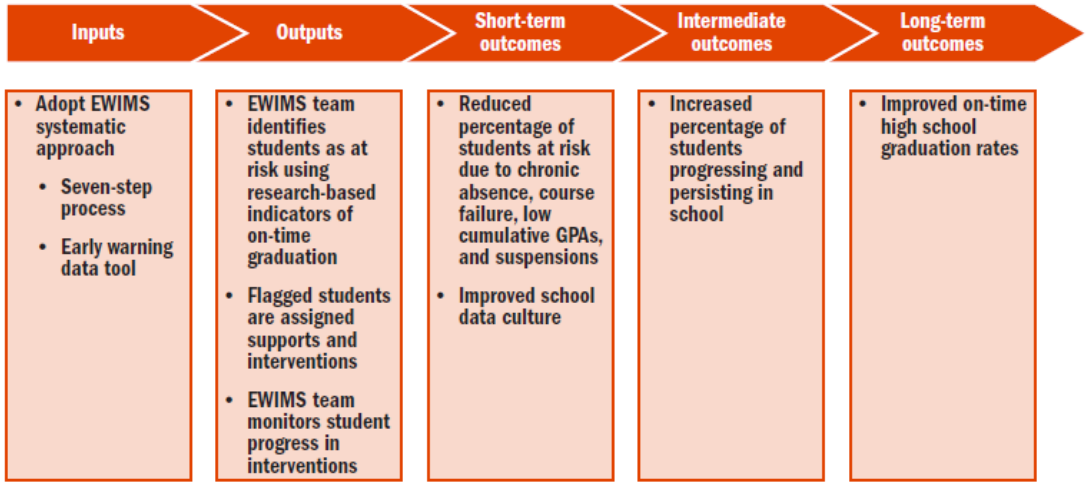
Appendices

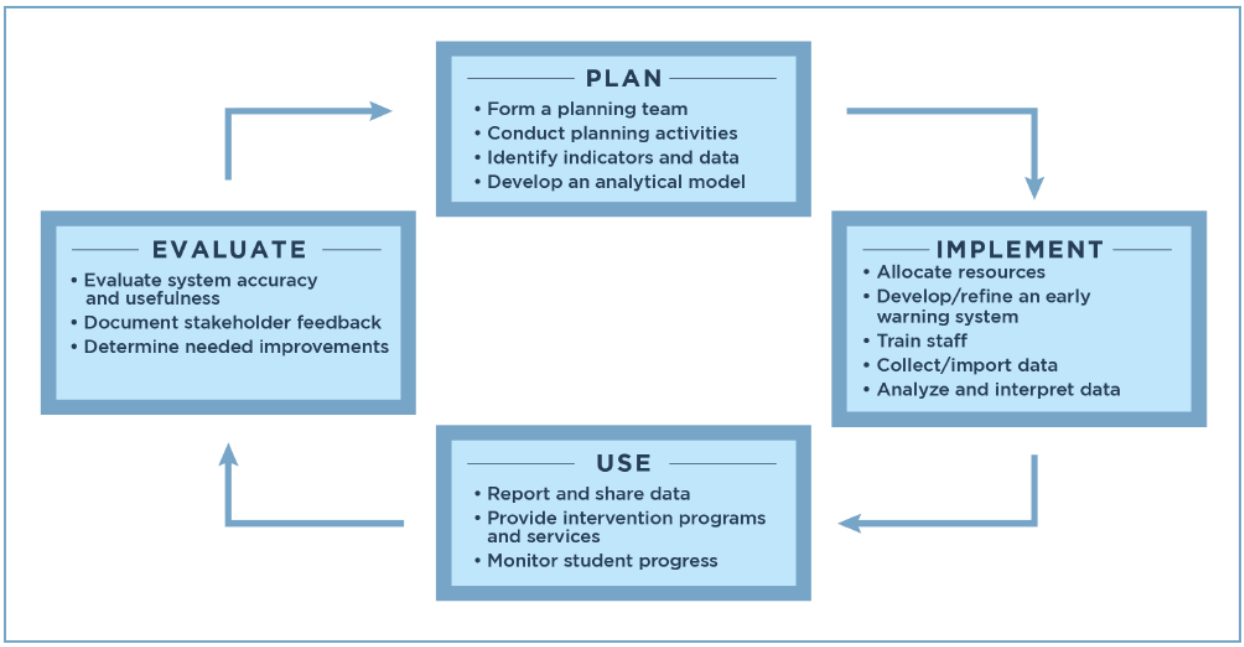
Appendix A. The EWIMS Implementation Process and Theory of Action





Source: Early Warning Intervention and Monitoring System (EWIMS) Implementation Guide. For more information about EWIMS implementation, see http://www.earlywarningsystems.org/wp-content/uploads/documents/EWSHSImplementationguide2013.pdf or Therriault et al. (2010).

Appendix B. The Continuous Improvement Process for EWS



Source: National Forum on Education Statistics. (2018). Forum Guide to Early Warning Systems (NFES2019035). U.S. Department of Education. Washington, DC: National Center for Education Statistics. P4

Appendix C. Early Warning System Evaluation Focus Group Protocol

Introduction

1. Welcome and thank everyone for volunteering to participate.
2. Introduce yourself, the cofacilitator, and the note taker.
3. Hand out the consent form.
4. Ask participants to review, ask any questions, and then sign the consent form.
5. Give a very brief overview of the project and goals for the focus group. In this case, the purpose of the study is as follows:
   The goal of this evaluation is to understand the implementation and perceived effectiveness of the Early Warning System (EWS) and to offer evidence-based considerations for promising practices. This evaluation will use focus group as one of the instruments to collect data and answer evaluation questions. After answering evaluation questions, the evaluation report will offer a discussion of evidence-based considerations from the literature in relationship to focus group and other results.
6. Give participants information about the process, time length, breaks, bathrooms, etc.
7. Distribute name tags for focus groups or community meetings.
8. Provide basic guidelines for the focus group, review them with participants, and consider posting them for everyone to see.
9. Let participants know that their identifying information will not be released in the report of the project.

Opening Questions

Start the focus group with the following opening questions. This will provide background on the participants and provide an opportunity for the facilitator to establish a rapport with the participants.

Please tell us a bit of yourself and your background.

1. At what school and grade level(s) do you work?
2. What is your position/role in your school (e.g., Teacher, counselor, administrator, supporting staff, or others?) and how long have you served in this role?
3. For how long have you been using the Early Warning System (EWS)?

Key Questions Pertinent to the Evaluation Questions

1. To get us started, please tell us about your goals and expectations for using the EWS? What student outcomes, if any, do you hope to influence by using the EWS?
2. This set of questions will ask about how you use the EWS to improve student outcomes.
   - Please provide a general description of how you use the EWS.
   - What indicators do you use in the EWS to identify students who are at risk? Such as attendance, behavior, or course performance, etc.

- What cutoff rules did you use for the indicators to help you determine if a student is at-risk? For example, a student was absent from your class more than 3 times a semester; a student course final exam was F; a student was suspended more than 1 time in a semester, etc.
- How do you analyze the data you get from the EWS to support student success?
    - Describe the process of using information, individually and collectively, to achieve your goals.
    - Do you meet with others in your school to discuss the data?
    - Have you used data from the EWS to design interventions?
    - If yes to the question above, how do you know whether or not the interventions that you designed are effective?

3. This next set of questions will ask about your perceptions of the effectiveness of the EWS.
    - Do you think using the EWS changed your approach to teaching or serving students? If so, how? If not, why?
    - Has using the EWS made you more effective on your job? If so, how? If not, why?
    - Do you think your students are benefitting from your use of the EWS? If so, how? If not, why?
    - Has the EWS helped your students achieve the expected outcomes since you started using it? If so, how? If not, why?

Ending Question

Is there anything else you would like to share about using the EWS or its effectiveness?

Thanks all for participating