

Considerations for Developing a Set of Standardized School Climate Survey Questions

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Contents

History of School Climate Survey Measures	1
Addressing the SBE Request	2
Comparison of School Climate Surveys	2
Education Partner Meetings	4
Meeting Design and Comparability Presentation	4
Vendor Meeting	5
LEA and Student Advocacy Group Meeting	7
Online Survey	10
Survey Findings	11
Summary and Considerations	13
Appendix	14
Considerations for Survey Item Development and Inclusion	14

History of School Climate Survey Measures

With the approval of a new accountability system in May 2016, the State Board of Education (SBE) established an annual review process of the Local Control Funding Formula (LCFF) evaluation rubrics, which are reported through the online California School Dashboard (Dashboard). This process includes the review of local indicators, performance standards, and self-reflection tools to consider necessary changes or improvements based on newly available data, recent research, and education partner feedback. The SBE adopted the Local Indicator Self-Reflection Tool for Priority 6: School Climate at its September 2016 meeting. The SBE later adopted minor revisions to the Self-Reflection Tool in March 2018 based on the School Conditions and Climate Work Group's (CCWG) work. Local education agencies (LEAs) must use the SBE-adopted self-reflection tools to report progress through the Dashboard.

In January 2023, the California Department of Education (CDE) recommended that the SBE approve new revisions to the Priority 6 Local Indicator Self-Reflection Tool, provide further guidance on these recommendations, and take additional action as deemed necessary and appropriate. Overall, the feedback from this item demonstrated a desire and need to improve the current self-reflection tool to address the following:

- 1. Frequency of survey administration
- 2. Disaggregation of student groups
- 3. Exploration of implementing a standard set of survey questions to be used by all LEAs

At its March 2023 meeting, the SBE directed the CDE to work with the Region 15 Comprehensive Center (R15CC) to design a process to explore the feasibility of implementing a small set of standardized survey questions that could be administered by LEAs in existing surveys. The R15CC is funded by a grant from the U. S. Department of Education to provide capacity-building technical assistance to state education agencies in Arizona, California, Nevada, and Utah.

Addressing the SBE Request

Comparison of School Climate Surveys

R15CC staff began by comparing survey items developed in the two relevant areas of focus, which looked at publicly available questions from the California Healthy Kids (CHKS), Panorama, and YouthTruth surveys. Other California vendors did not publish their questions. The comparison also considered Hanover Research but found that it customizes surveys for each client and does not use a core survey.

The comparison examined core constructs, comparing the main concepts in Panorama and YouthTruth core student surveys to the main constructs of the CHKS core surveys, noting the grade levels where each construct appears. School safety constructs included fairness, support for SEL, and anti-bullying; school connectedness constructs examined caring staff-student relationships, student learning environment, how strong the social connection is between teachers and students within and beyond the classroom, and the degree to which students feel they receive support and personal attention from their teachers.

A crosswalk of the core student surveys at the item (question) level revealed limited alignment across survey systems. This is primarily due to the differing definitions of the core constructs (main topics) within each survey system and Panorama's and YouthTruth's design decision to limit the number of items in their core. For example, the CHKS high school core survey has 139 items compared to Panorama (minimum 40 to maximum 70 items depending on which 4-6 constructs are selected) and YouthTruth (53 items). To add complexity, Panorama has classroom and school-level questions in its student survey.

However, CHKS, YouthTruth, and Panorama often have similar items in one of their supplemental surveys and topics for a given core construct. To compare pertinent key CHKS constructs—school connectedness and school safety—the comparison included a review of all of Panorama's and YouthTruth's supplemental surveys and topics to identify similar items. Looking at the school connectedness measure versus Sense of belonging, in CHKS, school connectedness is a school-level construct with general items on feeling close, happy, "a part of" and safe at school, and perceptions of teacher fairness. Student sense of belonging, measured in both Panorama and YouthTruth surveys, is the construct most similar to CHKS school connectedness. While an item on feeling close or connected is shared with Panorama and "feeling part of" is common to CHKS and YouthTruth, other items differ.



Regarding CHKS school safety items (e.g., how safe do you feel when you are at or going to and from school), Panorama and YouthTruth surveys do not include similar items. The closest measure would be Panorama's "How often do you worry about violence at your school?" However, Panorama's broader school safety scale includes items such as bullying and physical fights that CHKS has in its violence victimization and perpetration and harassment and bullying constructs. All three surveys include some items about disrespect and fairness that are part of Panorama's school safety scale.

In preparation for the education partners meetings to gather input on comparable items, R15CC shared the findings with SBE and CDE partners and prepared item comparisons from each of the three surveys.

СНКЅ	Panorama	YouthTruth
Examples of School Connected	ness Items	
 Five Items "Do you feel like you are a part of this school?" 4-point scale: "No, never" to "Yes, all the time" 	 Five Items (five different sets of response options) "Overall, how much do you feel like you belong at your school?" 5-point scale: "Do not belong at all" to "Completely belong" 	 Three items "I really feel like part of my school's community." 5-point scale: "Strongly disagree" to "Strongly agree" Plus, two additional items from another scale that address the same construct and use another set of response options
Examples of School Safety Item	15	
 One broad item and over 20 bullying and other violence items "How safe do you feel when you are at school?" 5-point scale: "Very unsafe" to "Very safe" 	 Six items (four different sets of response options) "How often do you worry about violence at your school?" 5-point scale: "Almost never" to "Almost always" 	 Five items "I feel safe during school." 5-point scale: "Strongly disagree" to "Strongly agree"

Table 1. Comparison of Sample Survey Items

In addition to having only three surveys available for comparison, California allows districts to construct their own surveys instead of using a vendor-developed survey. There is no record of which surveys LEAs use, and collecting and comparing all school climate surveys is not possible.

Education Partner Meetings

R15CC, SBE, and CDE staff designed two focus-group sessions, one with vendors for current California school climate surveys and one with LEAs and student advocacy groups familiar with the current school climate survey requirements. The groups provided input on possibilities for and the preferred method of gathering comparable school climate information statewide. School connectedness and safety are the requested focus areas for the survey items.

CDE invited potential meeting participants, including current California climate survey vendors and LEA and advocacy group representatives, and collaborated with R15CC in designing an agenda and slide presentation for each meeting. R15CC staff facilitated the discussions, with SBE and CDE staff mainly observing. Both meetings included an overview of the SBE request and a presentation by R15CC survey design experts explaining the process for developing comparable items for all California school surveys. Facilitated small groups then responded to the presentation and offered preferences and suggestions for collecting comparable data.

Meeting Design and Comparability Presentation

Each meeting began with CDE presenting background information on the January and March 2023 SBE climate survey meeting items and its request to explore the feasibility of implementing a small set of standardized school safety and connectedness survey questions (5–10) that could be added to existing surveys.

R15CC shared a comparison of survey items (Table 2) and presented several factors that could affect item comparability (Table 3) for comparing responses across districts when the districts use different surveys. The item wording and response options are the two critical factors; when they are different, it becomes impossible to make valid comparisons across districts. Even when the item wording is similar, valid comparisons cannot be made across districts unless the items are exactly the same.

Similarly, when the response options are similar or have the same number of response choices, valid comparisons cannot be made across districts unless they are exactly the same. For example, if two surveys use response items with five options, they will not be comparable unless the five response item options are identical.

Table 2. Survey Comparability

What matters for comparability	
Item wording	Anonymous versus confidential survey that has students enter an identification number
Response options	Participation rate
Matrix-style questions versus individual items	Participating grade levels
ltem order	Completing the surveys in class versus at a convenient time for the students (e.g., at home)
Survey length	Districts using different surveys can make valid comparisons with themselves over time, but comparisons cannot be made across districts using different surveys

Following the background and comparability issues, meeting participants were presented with the same discussion and selection options and were asked for their preference if common items were added to school climate surveys.

Table 3. Gathering Comparable School Climate Survey Information

1. What is your preferred option for collecting consistent school safety and connectedness survey data?

- a) Add a 'state survey' module to each of the current school climate surveys and remove duplicative items on the current surveys.
- b) Make no changes to your current school climate survey and administer a separate 'state survey' with 5–10 items.
- c) Add a 'state survey' module to each of the current school climate surveys and keep all existing items (even if some questions are duplicative.)

d) Other

Vendor Meeting

The vendor meeting, convened on September 21, 2023, included organizational representatives from the education and research sectors. These organizations closely collaborate with school districts, playing a pivotal role in developing and administering customized school climate

surveys. Eleven participants represented six organizations involved in survey development (Table 4).

Vendor organization	Representatives
Hanover Research	Content director
	Senior director
	Senior managing director
Kelvin Education	Chief executive officer
	Chief revenue officer
	Hybrid customer success manager
Panorama Education	Director of government affairs
	Account manager
University of California at Santa Barbara	Professor of school psychology
WestEd (CHKS)	Senior managing director
YouthTruth	Executive director

Table 4. Vendor Meeting Participants

Vendors discussed the options for gathering comparable survey information and provided several recommendations for standardization:

- Identify existing survey items intended to measure each construct and assess the comparability of items.
- Map the constructs assessed in each survey and identify the best (e.g., most psychometrically strong) one.
- Consider how standardizing items will affect students' experience (e.g., the length of the survey and completion time [survey fatigue]).
- Focus on adding new items. Getting organizations to agree on standardizing existing items seems like a big lift.
- Assess item bias across subgroups using psychometrics.

Some constraints that prevent creating a comprehensive survey item crosswalk include LEAs choosing from existing surveys, determining which items they will use, or constructing their own survey—independent of vendor—provided surveys.



Vendors expressed a need to provide district support for survey data use:

- Provide support for or monitor how districts use data. A current challenge for the state is building structures to support districts' data use for real school transformation ("Simply adding items to a survey won't fix this.").
- Provide support to help address equity concerns and assist districts in using the proper data to inform decision-making. Student perception and outcome data should be used to inform other data (e.g., understanding how school climate relates to other outcomes).
- Help districts increase survey response rates.
- Examine survey length and the impact of survey administration on LEAs.

There was also a concern that creating, adding, or removing survey items would disrupt the LEAs' ability to examine longitudinal trends or use vendors' national data for comparison.

Several vendors also wanted more clarity on SBE's objective: What problem is the state trying to solve?

LEA and Student Advocacy Group Meeting

The LEA and student advocacy group meeting, convened on October 17, 2023, gathered input on the potential impact and preferences for administering additional school safety and connectedness questions with school climate surveys. There were eleven LEA and education organization participants (Table 5).

Organization	Representative
California Teachers Association	Staff
Ceres Unified School District	Director of Child and Welfare Attendance
Ed Trust West	Manager of External Relations
Green Dot Schools	Manager of Data and Analytics
Long Beach Unified School District	Assistant Director, School Accountability Report Cards
Parent Institute for Quality Education (PIQE)	Director of Policy and Partnerships
Public Advocates	Two council members
Sonoma County Office of Education	Director of Data and Engagement

Table 5.LEA and Student Advocacy Group Meeting Participants



Organization	Representative
South Pasadena Unified School District	Coordinator
Teach Plus California	California executive director

Meeting participants indicated that their districts currently administer Panorama, CHKS, and YouthTruth school climate surveys. Additionally, one district uses a vendor-created supplemental study.

Following the presentation of the background and comparability issues and small-group discussions, participants responded to a poll by selecting their preferred option for collecting comparable data.

School Climate Survey Data	
 What is currently your preferred option for collecting consistent school safety and connectedness data? (S Choice) * 	ingle
Add a state survey module to each of the current school climate surveys (even if some questions are dupli	55%
Add a state survey module to each of the current school climate surveys but remove duplicative questions) 27%
Make no changes to the current surveys, but administer a separate state survey with 5–10 questions in ad-	di 9%
Unsure/Need More Information	9%

The majority preferred adding questions to current surveys and keeping all original questions, even if some are duplicative.

Overall, group feedback revealed that

- participants were excited that the state was exploring creating a standardized item set;
- participants would like to see further survey comparisons (e.g., number of response options, length);
- participants would like to build their understanding of why surveys are not comparable, including item comparability and survey administration;
 - create a standardized set of expectations or conditions under which youth take surveys;



- participants would like survey translation to be considered;
- participants made recommendations and asked questions based on a school climate review;
 - Could a technical design group be created to explore possibilities to support schools and districts?
 - What is a representative sample?
 - Are 5–10 questions enough to create a standardized set of items?
 - What could be asked of families about school climate?
 - Do these surveys have only quantitative questions or also qualitative questions?

Small groups also discussed how each option could work in their LEA setting.

- Add a state survey module to each of the current school climate surveys (even if some questions are duplicative.) 55%
 - Cons:
 - There was a strong negative reaction from one participant to making no changes, administering a separate survey, and adding more than 10 items.
 - There was concern about LEA bandwidth to administer an additional module.
 - Pros:
 - Some participants expressed interest in administering a separate survey to allow districts to "do what they want" regarding implementing a local survey (e.g., creating their own school climate survey).
 - Adding a state module would allow districts to continue to examine longitudinal trends on their current survey (preserve their local measures and data).
 - There was a suggestion for a "weaning off" period where duplicate items are slowly removed. This would allow time to check scale validity on how students are answering the same type of questions.
 - Students and teachers have a level of "trust" with the existing surveys, so keep those and add a separate state survey module.
- Add a state survey module to each of the current school climate surveys but remove duplicative questions on current surveys. 27%
 - Many participants agreed that duplicate questions should be removed, citing concerns about student fatigue.



- There was also a concern about LEA and school capacity to implement another module.
- Make no changes to the current surveys but administer a separate state survey with 5–10 questions in addition to the current survey. 9%
 - This was the least popular option, with concerns about survey fatigue.
- Unsure or need more information. 9%
 - There was a request to see survey comparability to understand how direct or broad the current questions are (e.g., items about school safety, youth experiences, presence of law enforcement).

Following the meeting, CDE and SBE staff expressed a concern that the limited number of LEAs at the meeting was not enough to provide valid information. R15CC offered to create an online survey with the preference options and create a video of the slide presentation to share more broadly. CDE would identify a list of LEAs to invite to respond. SBE staff also requested additional information on survey item development and inclusion (Appendix).

Online Survey

To gather additional input from education partners, SBE, CDE, and R15CC created an informational video and survey to ensure additional LEAs could provide input on the potential impact of including a comparable set of school climate survey items. The narrated slide presentation was accompanied by a brief online survey to collect data on school, district, county office of education (COE), and professional organization preferences for collecting consistent school safety and connectedness survey data, presenting the same options discussed in the vendor and LEA and student advocacy group meetings.

To give the survey wide distribution, CDE partnered with the Small School Districts Association (SSDA), the Association of California School Administrators (ASCA), and the California Charter School Association (CCSA) to invite their members to provide input. Focus group invitees were also included. An email with the video and survey link was sent on November 27, 2023, with responses due by December 11, 2023. Those included were invited to share the survey link with colleagues who might want to provide input.



A total of 334 individuals responded to the survey in November and December. They represented small and large districts, charter schools, and professional organizations. The survey respondents are best described as a "convenience sample" because they were the easiest for CDE staff to access, and the sample may not be representative of all staff from schools, districts, COEs, and professional organizations across the state. The majority (75%) of respondents were from LEAs. County offices of education and professional organizations (9% each) were also represented, as were individual schools (7%.). See Table 6 for the online survey questions.

Table 6. Online Survey Questions

1. What is your preferred option for collecting consistent school safety and connectedness survey data?

- a) Add a 'state survey' module to each of the current school climate surveys and remove duplicative items on the current surveys.
- b) Make no changes to your current school climate survey and administer a separate 'state survey' with 5-10 items.
- c) Add a 'state survey' module to each of the current school climate surveys and keep all existing items (even if some questions are duplicative.)
- d) Other.

2. If you have another option for how consistent survey data could be collected, please write it below.3. What is your professional affiliation (e.g., name of school, district, COE, professional organization)?

Survey Findings

The responses to the question about the preference for collecting consistent school safety and connectedness survey data are displayed in Figure 1.

Figure 1.



- Sixty-five percent selected "Add a 'state survey' module to each of the current school climate surveys and remove duplicative items on the current surveys."
- Twenty-one percent selected "Make no changes to your current school climate survey and administer a separate 'state survey' with 5–10 items."
- Eight percent selected "Add a 'state survey' module to each of the current school climate surveys and keep all existing items (even if some questions are duplicative)."
- Six percent selected "Other."

Less than 75 respondents completed the question asking them to describe another option for collecting consistent survey data, and these individuals provided a range of responses. Multiple respondents asked for continued local control of the survey questions, advocated for the statewide use of existing school climate surveys, suggested strategies for administering school climate surveys, and included recommendations for selecting appropriate survey items. The respondents did not provide a viable option supported by more than a handful of individuals for collecting consistent school safety and connectedness survey data not covered by the options included in the closed-ended question described above.

Summary and Considerations

Overall, the majority expressed support for a set of comparable items on school climate surveys. The most popular solution was incorporating the standard state items and removing duplicate items. It was also suggested that vendors be required to remove the duplicates.

There was a suggestion that brief surveys, administered twice yearly, would provide better information for actual school and program improvement. At the same time, respondents expressed concern about "survey overload" and increasing LEA requirements. The possibility of including a climate survey for parents and community members also arose in both the LEA meeting and the online survey.

A few comments to the online survey expressed concerns about maintaining local control using local indicators and offered the possibility to require administration and reporting only of the 5–10 question "state survey" without additional local survey questions unless the LEA chooses to add additional items.

In response to the "What matters" comparability section of the presentation (Table 3), there were suggestions to establish a specific window of time during which the survey must be conducted and that all surveys be administered during the school day.

Upon reviewing the input, SBE and CDE asked R15CC to explain the process for developing common survey questions (Appendix). This analysis includes the recommendation for using a rigorous process to develop the items, given the importance of the school safety and connectedness scales for accountability and the collective time respondents will spend completing the scales. If a competitive bidding process were used to select a team to develop school safety and connectedness scales, the proposed budget would likely be at least several hundred thousand dollars. However, a variety of factors would lead to increased costs, such as whether parent and teacher scales would be developed in addition to student scales and the number of languages needed for translations.

Appendix

Considerations for Survey Item Development and Inclusion

Developing survey scales, such as ones addressing school safety and connectedness, is generally a lengthy multi-stage process. Multiple journal articles (e.g., Boateng et al., 2018¹) and textbooks (e.g., Johnson & Morgan, 2016²) outline the recommended steps for developing survey scales. A team of survey methodologists and school climate content experts from a contract research firm or a university would be needed to develop survey scales addressing school safety and connectedness.

Given the importance of the school safety and connectedness scales for accountability and the collective time respondents will spend completing the scales, the R15CC recommends using a very rigorous process to develop the scales. If a competitive bidding process were used to select a team to develop school safety and connectedness scales, the proposed budgets would likely be at least several hundred thousand dollars. However, a variety of factors would lead to increased costs, such as whether parent and teacher scales would be developed in addition to student scales and the number of languages needed for translations.

The nine steps outlined by Boateng et al. (2018) for developing and validating survey scales follow, and a summary of the process needed to develop the school safety and connectedness scales is provided below.

Step 1: Domain(s) Identification and Item Generation

- Use previously identified school safety and connectedness as the domains.
- Review existing survey items used in past research for these two domains.
- Write new items based on the literature review.
- Identify two to five times as many items as needed in the final versions of the scales.
- Identify the item response options (i.e., number of points and unipolar vs. bipolar).

¹ Boateng, G. O., Neilands, T. B., Frongillo, E. A., Melgar-Quiñonez, H. R., & Young, S. L. (2018). Best practices for developing and validating scales for health, social, and behavioral research: a primer. *Frontiers in Public Health, 6* (149), 1–18. <u>https://doi.org/10.3389/fpubh.2018.00149</u>

² Johnson, R. L., & Morgan, G. B. (2016). *Survey scales: A guide to development, analysis, and reporting*. Guilford Publications.

Step 2: Content Validity

- Assess whether the items adequately measure the school safety and connectedness domains.
- Have school climate content experts rate the items for content validity.

Step 3: Pre-testing Questions

- Conduct cognitive interviews where respondents read the items and talk through their thought processes.
- Conduct two or three rounds of interviews until saturation is reached.

Step 4: Survey Administration and Sample Size: Gathering Enough Data from the Right People

- Determine the sample size needed for piloting the survey scales (this would likely be thousands of students and 25+ schools, but more schools would allow for greater diversity in the survey respondents).
- Administer an online version of the newly developed survey scales (few districts currently use paper surveys).

Step 5: Item Reduction Analysis

- Identify items that are least related to the domains of interest and drop them.
- Determine which items are correlated with each other and form a single factor.
- Help remove items that all students rate highly.

Step 6: Factor Extraction

- Conduct factor analysis with the items in both domains.
- Ensure all the school connectedness items "hang" together and all the school safety items "hang" together, and the two domains are moderately correlated. If this is not the case, the items may need to be revised.

Step 7: Dimensionality Tests

- Determine if the factor analysis results hold up with another sample. An additional sample could be collected, or some of the initial sample could be reserved for this purpose.
- Test for measurement invariance (i.e., whether the factor structure is the same for different groups, such as schools with low or high rates of free lunch participation, males and females, different grade levels). The key question is whether the items have different meanings for different groups.

Step 8: Reliability Tests

- Test the consistency of responses when the scales are repeated under the same conditions.
- Assess reliability by calculating Cronbach's alpha and using test-retest reliability (i.e., the scale is administered two weeks apart to the same students, and the correlation is calculated).

Step 9: Validity Tests

- Examine whether the scales measure the constructs (e.g., school safety) they were designed to assess.
- Look at criterion validity (i.e., Does the new school connectedness scale correlate strongly with the CHKS or Panorama school connectedness scales?) by having students complete the newly developed and existing scales simultaneously.

