



Welcome to Today's Webinar!

School Climate Survey Series: Survey Development

This event will start at 11:00 am EDT.

Welcome to Today's Webinar



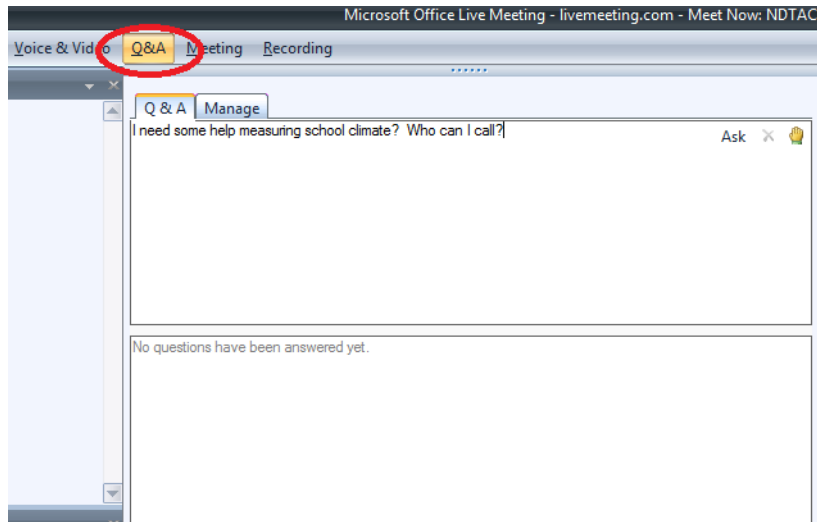
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Q&A



If you have a question for the presenters, please type it in the Q & A Pane or email sssta@air.org during the Webinar.

Evaluation



Safe and Supportive Schools
Engagement | Safety | Environment

Participant Feedback

Establishing Supportive Relationships between Teachers, Staff, Students and Families
Wednesday, February 17, 2011

Please provide us with your feedback on today's Webinar by answering the questions below. The form should only take a few minutes to complete and all responses will be completely anonymous. Your participation is voluntary.

* 1. My role can best be described as (please check as many as apply):

- | | | |
|--|--|-----------------------------------|
| <input type="checkbox"/> Community Member | <input type="checkbox"/> School/District Administrator | <input type="checkbox"/> Teachers |
| <input type="checkbox"/> Family Member | <input type="checkbox"/> State Administrator | |
| <input type="checkbox"/> School Support Staff Member | <input type="checkbox"/> Student | |

An event evaluation will appear as the last slide in the presentation. Please input your answers *directly* into the slide. All answers are *completely anonymous* and are not visible to other participants.

For assistance during the Webinar, please contact the Safe and Supportive Technical Assistance Center at sssta@air.org.



The Safe and Supportive Schools Technical Assistance Center



- Funded by the U.S. Department of Education's Office of Safe and Drug-Free Schools.
- Provides training and support to states, including 11 grantees funded under the Safe and Supportive Schools Program and other state administrators; administrators of districts and schools; teachers; support staff at schools; communities and families; and students.
- Goal is to improve schools' conditions for learning through measurement and program implementation, so that all students have the opportunity to realize academic success in safe and supportive environments.

*The content of this presentation was prepared under a contract from the U.S. Department of Education, Office of Safe and Drug-Free Schools to the American Institutes for Research (AIR). This presentation does not necessarily represent the policy or views of the U.S. Department of Education, nor do they imply endorsement by the U.S. Department of Education.

Survey Development

John V. Shindler Ph.D., Alliance for the Study of School Climate



Safe and Supportive Schools
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Which of the following best describes your current role?

- State Education Personnel
- District or School Administrator
- Teacher or School Support Staff
- Community or Family Representative
- Student
- Researcher
- Other



Where are you in the process of developing a survey?

- We are planning to adopt an existing instrument.
- We are planning to modify an existing instrument.
- We are planning to create a new instrument.
- We are modifying an existing instrument and adding new items.
- I am not sure; we are starting to plan.



- **Future webinars will cover the following school climate survey topics in greater detail:**
 - Survey administration (April 27 and 28)
 - Analysis of survey data (May 25 and 26)
 - Reporting and dissemination (June 29 and 30)



- 1 Beginning with the End in Mind
- 2 Validity and Mapping to the S3 Model
- 3 Creating and/or Selecting Survey Items
- 4 Reliability and Survey Analysis
- 5 Connecting Measurement to School Improvement

Beginning with the End in Mind





- **What do you want your survey data to accomplish?**
- **How will stakeholders use the data that are generated by the survey?**
 - Assessment of the current state of climate?
 - Understanding why the climate is how it is?
 - Taking action to improve the climate?
- **Your survey design and item selection will influence what your stakeholders infer to be of importance and will largely dictate how you will ultimately be able to use your data.**





■ Survey Target groups

- Students
- Parents/Families
- Teachers/Staff

■ Survey Considerations

- *Length* – Consider your respondents.
- *Alignment* – Do you want to have comparable items that are administered to more than one stakeholder group?
- *Discrete concerns* – What do you want to know from each group?
- *Perspective* – Who can provide an accurate and informed perspective to a particular area of the climate, and who cannot?





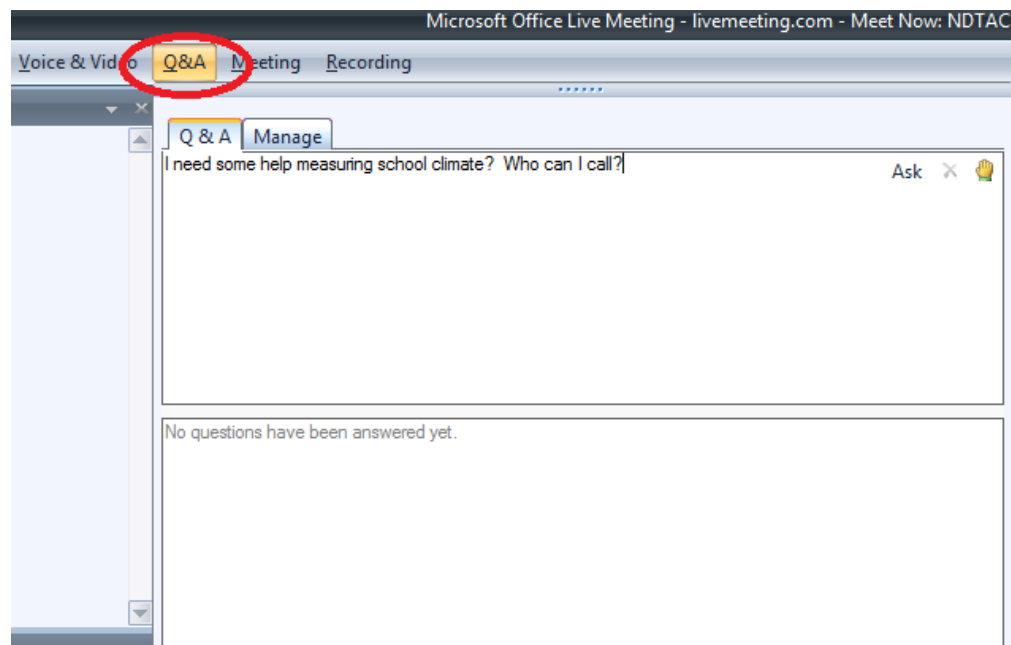
Have you had experience surveying any of these groups?

- Students
- Parents/families
- Teachers/staff
- All of the above
- Students and parents/families
- Students and staff

Questions?



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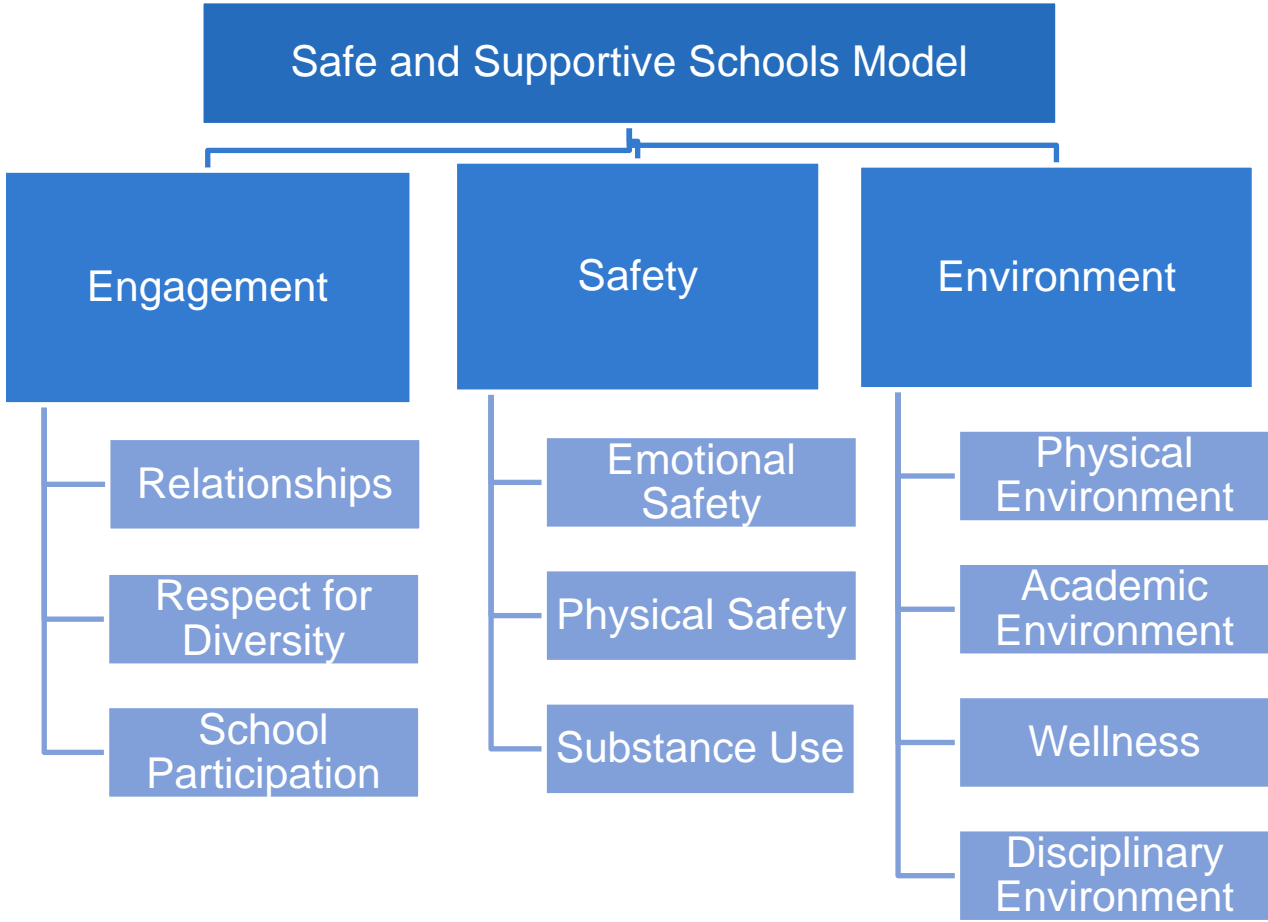
Validity and Mapping to the S3 Model





- **The three areas of school climate as outlined in the OSDFS S3 Model:**
 - Safety
 - Engagement
 - Environment
- **What does *safety* look and feel like?**
- **What does *engagement* look like, and/or what can be judged to influence more or less engagement?**
- **What defines a “good classroom *environment*,” and/or what kinds of practices lead to higher quality environments?**

Safe and Supportive Schools (S3) Model



How Do You Define Quality?



- **Given the ten dimensions of the Safe and Supportive Schools (S3) Model that outline the areas essential to a comprehensive definition of school climate, how will your survey imply levels of quality for each area?**
- **One construct that has proven useful for characterizing the level of climate quality is the three part concept of “success psychology.”**
- **Success Psychology is defined by the following:**
 - **Internal vs. external locus of control** (i.e., To what degree do students and others at the school feel that they are in control of their actions, empowered and possess a sense of personal responsibility?)
 - **Belonging and Acceptance** (i.e., To what extent do students and others at the school feel as though they are part of something larger, and are encouraged to be self-accepting?)
 - **Growth vs. Fixed Ability Orientation** (i.e., To what extent do practices at the school promote each student’s belief that his/her success will be a result of what he/she puts into an activity rather than something that is innate/fixed?)





- **California Healthy Kids Survey (CHKS, v.E13, item #11)**
 - Measures the degree to which a student experiences a feeling of being part of his/her school
 - Maps onto the S3 model dimension for relationships

11. Do you feel like you are part of this school?

- a) No, never**
- b) Yes, sometimes**
- c) Yes, most of the time**
- d) Yes, all of the time**

Example Item – Discipline Environment



- **School Climate Assessment Instrument (SCAI, v7.4 S-S)**
 - Measures the amount of student voice and choice that exists in a school
 - Maps onto the S3 Model dimension related to discipline environment
 - Implies levels of quality in relation to how well disciplinary practices promote each student’s internal locus of control

High		Middle		Low	
Maximum use of student generated Ideas		Occasional use of student generated ideas		Teachers make the rules	
5	4	3	2	1	



Example Item – Respect for Diversity Dimension



- **Comprehensive School Climate Inventory (CSCI, v.MS/HS, item #6)**
 - Measures the degree to which students report respect for differences at their school
 - Maps onto the S3 Model engagement dimension sub-category respect for diversity

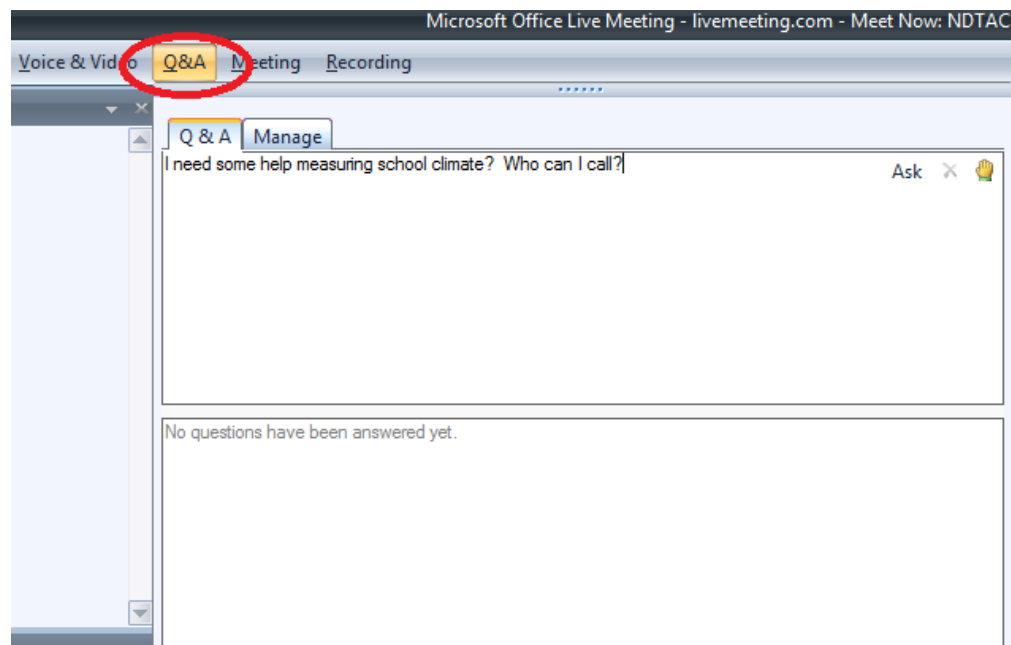
6. Students in the school respect each other's differences (for example gender, race, culture, etc).

- a) Strongly Agree**
- b) Agree**
- c) Neutral**
- d) Disagree**
- e) Strongly Disagree**

Questions?



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Creating and/or Selecting Survey Items





- **In general validity deals with how well items or scales measure what they are intended to measure.**
 - **Concurrent validity** – Does it correlate with other valid measures?
 - **Construct validity** – Does the survey measure various dimensions of school climate (as you choose to define it) or something else?
- **Validity checks**
 - Sub-scales should correlate with one another.
(Everything should be inter-related if your measure is getting at the essential elements of climate.)
 - To what extent are you measuring “agreeableness”?
(Some groups will be more *agreeable* and less critical about the state of their school regardless.)
 - To what extent are you measuring contentness or contentment?
(Students who are used to being in a school with less desirable school climate, but do not know anything else, may be generally more *content*.)



- **The Safe Supportive Schools Website has a growing list of school climate surveys which have been vetted for reliability and validity. They can be found at:**

<http://safesupportiveschools.ed.gov/index.php?id=133>

- **When to adopt, adapt or create?**

- What does your state or district want to know?
- How will the data be used?
- Advantage of adopting or adapting an instrument: sufficient levels of psychometric soundness (i.e., validity and reliability) have already been established.



- **The format and structure of the items in your survey will determine to a great extent what you can do with the data.**

- **Incidence data**
 - Incidents are symptoms
 - Relatively concrete
 - How will you ensure reliability in reporting (is high or low reporting encouraged by current policy or proposed implications of a “safety score”)?



Item Structural Options (Continued)



■ Yes/No items

- Advantages
 - Good for either/or kinds of data
 - Create a percentage that is easy to interpret
- Disadvantages
 - Cannot infer strength of preference
 - Difficult to infer the “why?”

■ Example:

- Have you been bullied in the past 1 month at your school?
 - a. Yes
 - b. No





Ordinal Options: Likert 4 point scale vs. 5 point scale

4 Point Scale

- Are you happy to be at this school
 - a) No, never
 - b) Yes, some of the time
 - c) Yes, most of the time
 - d) Yes, all of the time

From the CHKS v.E13

- Provides a sense of strength of preference
- Forces a +/- opinion
- Levels vary only in perception

5 Point Scale

- In my school, we talk about ways to help us control our emotions
 - a) strongly agree
 - b) agree
 - c) neutral
 - d) disagree
 - e) strongly disagree

From the CSCI v.MS/HS

- Provides a middle/neutral option
- Option wording can be changed to grammatically align with the stem





■ Analytic-trait scale option

- Advantages
 - Provides a higher degree of concreteness
 - Can provide a stronger inference for practical action
- Disadvantages
 - Can potentially be more clumsy to develop and/or interpret
 - More difficult to construct

High		Middle		Low	
When disciplining students, teachers typically focus on the problematic behavior, not the student as a person		When disciplining students, teachers are typically assertive yet often reactive, and give an overall inconsistent message.		When disciplining students, teachers are typically personal and often antagonistic.	
5	4	3	2	1	

Item Structural Options (Continued)



■ Nominal item option

- Advantages
 - Can help infer quantities
 - Concrete indicators promotes reliable assessment
- Disadvantages
 - Difficult to pre-determine appropriate range

■ Example:

- How many times a week do you hear one student say something mean or abusive to another at your school?
 - a. 0-1
 - b. 2-4
 - c. 5-9
 - d. 10 or more



■ What type of item have you had the most experience using?

- Incident data
- Yes/No items
- Ordinal option items (likert scales)
- Analytic trait scale items
- Nominal items



▪ Length of the Survey

- Fewer items promote a better response rate and attention level.
 - Drop outs
 - Random response
 - Random non-response
- You cannot interpret survey data from questions that were not asked.

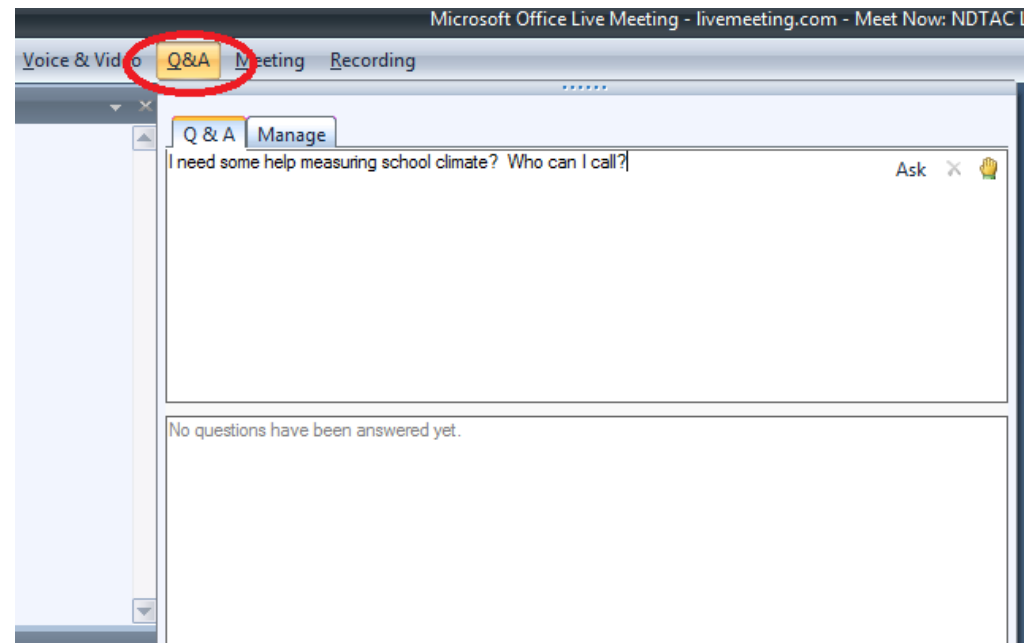
▪ Length of survey sub-scales

- How many items do we need to adequately cover an area?
- Economy vs. more depth related to actionable areas for improvement

Questions?



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Reliability and Survey Analysis





- **Reliability deals with the consistency of your measurement and the degree to which it measures the same way each time it is used.**
- **Promoting Reliability**
 - Ideally include only one idea per item (i.e., avoid double-barreled items such as “How much verbal or physical abuse occurs at your school?”)
 - The more concrete and behavioral, the more reliable (as well as actionable)
 - Grounded in a sound conceptual framework
 - Tested statistically





- **Variance profile** - proportion of responses for each option achieves acceptable levels of variation and discrimination (i.e., avoid the problem of an item for which most/all respondents rate toward one extreme or the other)
- **Cross-group and cross-time stability** (i.e., test-retest reliability – surveys should be robust across similar groups and across time, BUT should also reflect variation between groups that experience actual differences in school climate)





- **Pilot testing**
- **Think-out-louds and focus groups**
 - Good way to get at wording issues, vocabulary problems, missing content, and even issues related to validity/survey assumptions.
 - Diversity of all kinds should be represented in pilot test participant samples.
- **Statistical analysis of scale function**
 - Chronbach's alpha correlation level (0.7 or better)
 - High alpha coefficients reflect relationships among items (respondents rate different items similarly)
 - But does a high alpha correlation indicate that you are asking essentially the same idea in different ways and the item could therefore be dropped to shorten the survey?
 - Or does it mean that items reflect interrelated concepts/experiences?
 - Answers are usually related to item face validity. Up to 0.9 scale alphas suggest strong relationships, but too much higher (i.e., .95) may indicate redundancy.

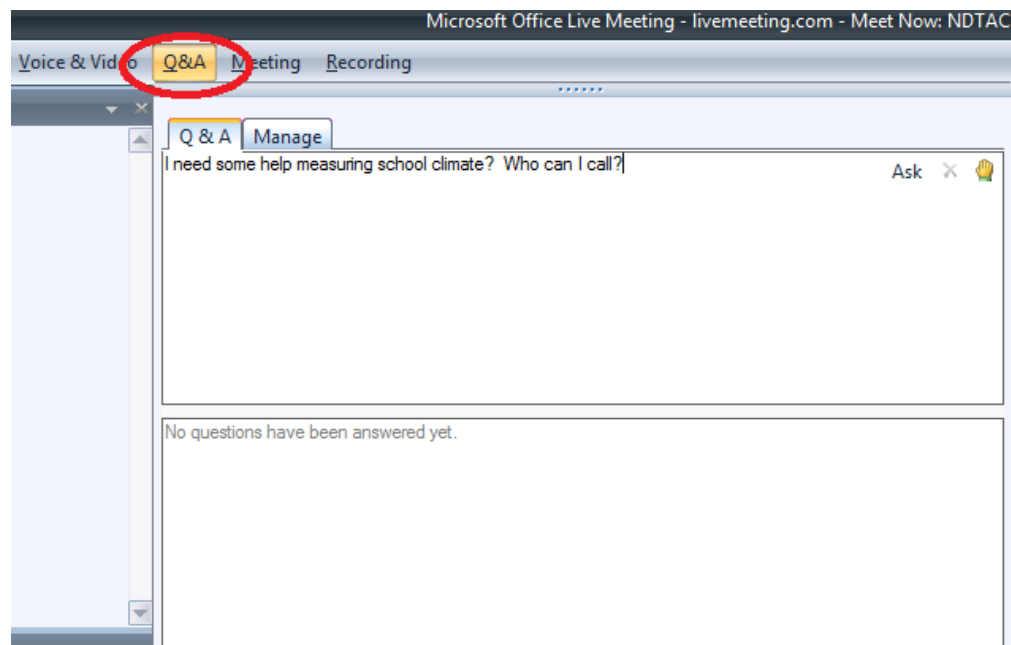


- **Goal = Distinct/discrete content, but related** (to your theoretical construct for good climate, as evidenced in the survey as a whole).
- **Corrected item total correlation** (How does the item correlate with all the other items on the survey as a whole?)
- **Changes in alpha coefficients when items are omitted**
- **What if reliability testing shows a low item correlation?**
 - Is the problem a wording issue?
 - Is the item valid and worth keeping even if it seems to be a loner (i.e., maybe it is a solid indicator of your broader theoretical construct, or it is just something you want practitioners to give attention to throughout the process)?
 - Does the item need to be dropped or reworked?

Questions?



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Connecting Measurement to School Improvement



Safe and Supportive Schools
Engagement | Safety | Environment

Connecting Measurement to School Improvement Efforts



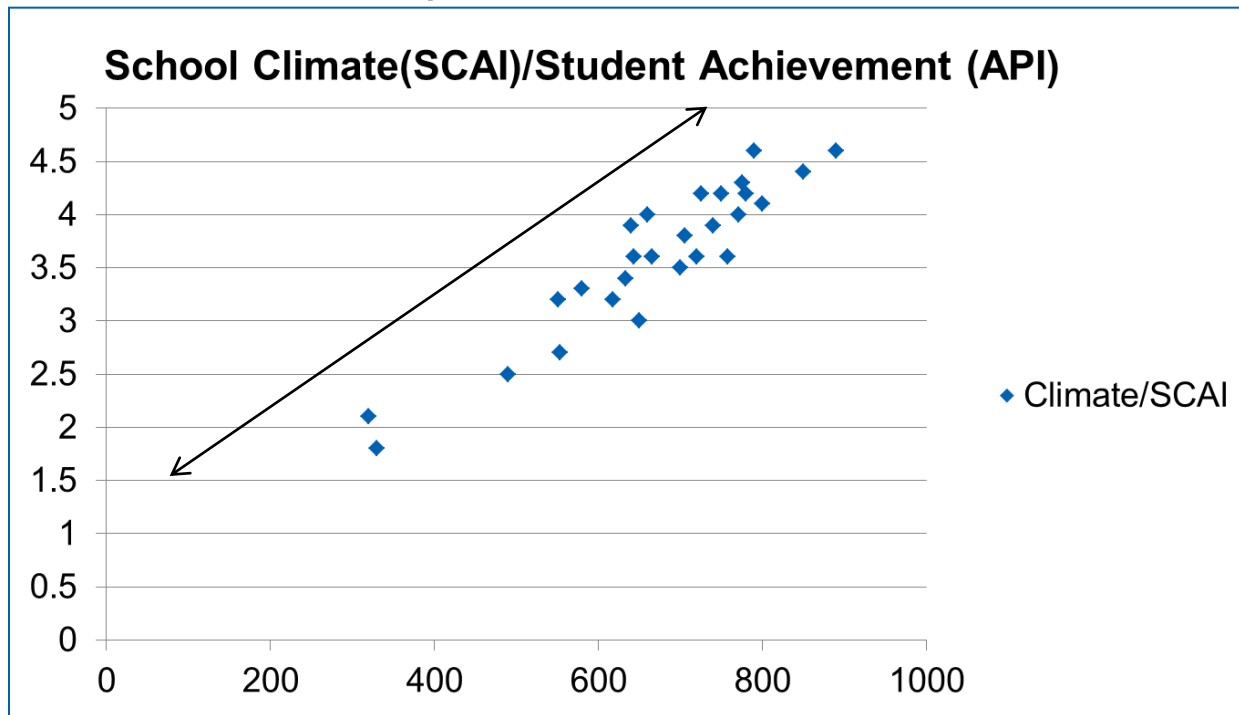
- **Develop, borrow or modify your survey items with the end in mind – soundness as well as usefulness.**
- **Ask yourself the following questions as you build/evaluate your survey:**
 - What kinds of data will be the most empowering to users?
 - Do your survey items/scales provide data that can either infer high quality action and/or raise the level of awareness/understanding of what good school climate looks like for your users?
 - Do your survey items imply that creating high quality climate “is about what we do at our school” (i.e., an internal locus of control) ?
 - Do your survey items provide insight to schools that are struggling with their climate as well as those that want ideas to go from good to great?
 - Does your survey imply a road map for getting from lower levels of climate to higher levels, or at least a sense of what getting “better” involves?



School Climate by Student Achievement



- In a recent study by the Alliance for the Study of School Climate, the School Climate Assessment Instrument (SCAI, ratings from 1 to 5) was administered at 30 schools and compared against each school's Academic Performance Index (API - ratings from 200 to 1000). The result was a 0.7 correlation and the scatter plot data shown below.



Key Take Away Points

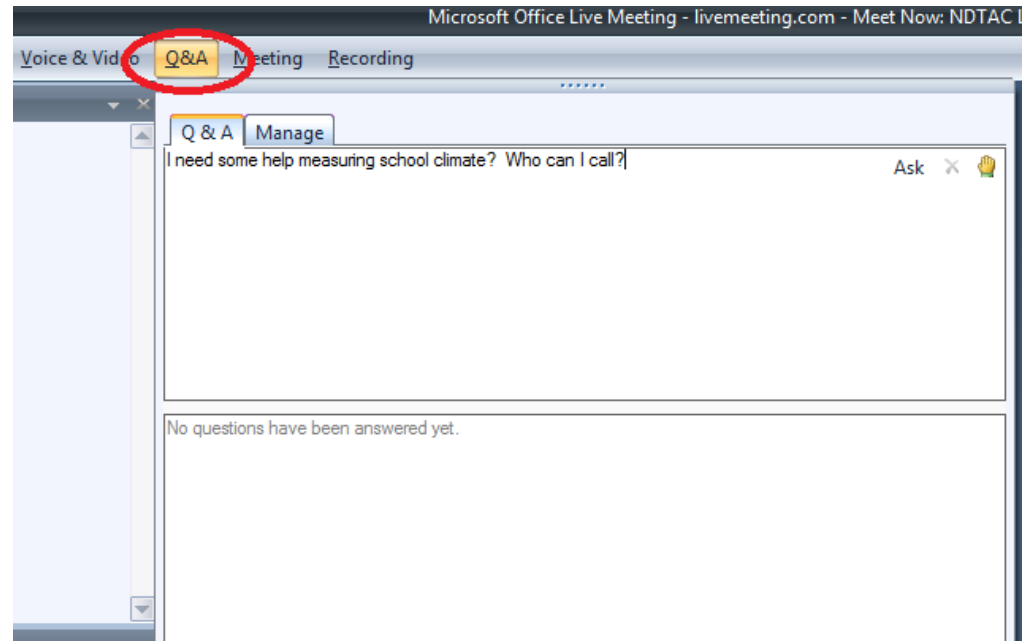


- Consider your ultimate intended **goals and outcomes** as you develop your instrument.
- Have a **conceptual framework** for school climate, which could include the S3 Model and a definition of quality, that guides your survey development process.
- Confirm **validity** = Are you measuring what you are intending?
- Confirm **reliability** = Are your survey items consistent with one another, consistent across groups, and consistent with your overall conceptual framework?
- Consider how your survey can contribute to the **school climate improvement** efforts in your target schools.

Questions?



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- **Addressing Risk Behavior through Positive Youth Development Strategies**

April 13, 2011 **4:00 pm – 5:30 pm ET**

April 14, 2011 **11:00 – 12:30 pm ET**

- **Survey Administration**

April 27, 2011 **4:00 pm – 5:30 pm ET**

April 28, 2011 **11:00 am – 12:30 pm ET**

- **School Based Climate Teams (Part 1)**

May 11, 2011 **4:00 pm – 5:30 pm ET**

May 12, 2011 **11:00 – 12:30 pm ET**

- **Analysis of Survey Data**

May 25, 2011 **4:00 pm – 5:30 pm ET**

May 26, 2011 **11:00 – 12:30 pm ET**



- **Violence Prevention**

June 8, 2011 **4:00 pm – 5:30 pm ET**
June 9, 2011 **11:00 – 12:30 pm ET**

- **Reporting and Dissemination**

June 29, 2011 **4:00 pm – 5:30 pm ET**
June 30, 2011 **11:00 – 12:30 pm ET**

- **Student Engagement**

July 13, 2011 **4:00 pm – 5:30 pm ET**
July 14, 2011 **11:00 – 12:30 pm ET**

- **Substance Abuse Prevention**

August 24, 2011 **4:00 pm – 5:30 pm ET**
August 25, 2011 **11:00 – 12:30 pm ET**



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Presenter Contact Information



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