



## Survey Development

### WEBINAR QUESTION AND ANSWER SUMMARY

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On March 30 and 31, 2011, the Safe and Supportive Schools Technical Assistance Center (Center) hosted a Webinar, titled *Survey Development*. During the session, the presenter, Dr. John Shindler, Professor in the Division of Curriculum and Instruction of the Charter College of Education at California State University, Los Angeles, received several questions from the audience. Since the presenter could not answer all of the questions during the event, the Center has prepared the following Webinar Question and Answer Summary with responses to each question. For additional information, please email or call the Center ([sssta@air.org](mailto:sssta@air.org); 1-800-258-8413).

*Please note the content of this summary 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 Q&A summary does not necessarily represent the policy or views of the U.S. Department of Education, nor does it imply endorsement by the U.S. Department of Education.*

**Q1. In your experience, are there any school climate measures where students report more accurately than teachers?**

**John Shindler:** That question seems to imply a couple more questions, *do students provide more responses that are accurate in general, and do some instruments assess students more accurately?* I don't have experience with all the instruments, but I think there would be a difference among them. What we find is that those who have the most valid and reliable understanding of what is going on at any school are the students. Parents are a little bit removed, but I don't want to discount their data because it is really valuable. Even if parents have a misperception, it doesn't matter; we want to know their perceptions even if they are in the end misperceptions. Teacher data tend to include a lot of assumptions about what is happening or not happening. Sometimes their more educated perspective provides a more accurate assessment. When it comes to practice, they can in some cases over-estimate the quality of the practice, or the efficacy of those things that are intended to promote good climate. That is not always the case, especially if they are instructed to rate the school overall and not just what happens in their class. Overall, the students are probably the most reliable source of data, but I would assess as many groups as possible.

As you start looking at items and creating items, if items refer to observable events and concrete practices that are perceived to be happening or not happening, ratings tend to be pretty reliable. If on the other hand we are simply measuring perceptions, then you may find different groups have different perceptions or a large variance among the raters. For example, if we ask, *do students do X at this school*, then most respondents will have a pretty accurate perception. If we



ask, *are you happy at the school*, we cannot expect to see the same level of agreement among the responses. There is a greater level of variation in perceptions than observations.

**Q2. In your experience, is there any school climate measure where students report more accurately than staff or parents?**

**John Shindler:** There are instruments that have been designed just for students, but if we want data from those other stakeholder groups we may want to think about the idea of content and/or item alignment. Often instruments are created for a single group and lack alignment across groups. If we want to align items for the sake of comparison or validation, then we might want to think about either instruments that do have alignment or about creating items so that we can achieve alignment.

**Q3. What are the areas or how do you determine what questions to stay away from that are heavily influenced by biases that would skew a survey?**

**John Shindler:** Any survey that gets at the essential phenomenon of climate will have power. That carries benefits as well as potential hurdles. We had a couple bad experiences years ago where after taking our survey the staff engaged in a lot of finger-pointing, laying blame, and going after administrators. The quality of teaching and leadership are central to understanding the climate, but they are loaded areas. We should ask, *do we want that kind of data, or is it worth the potential political fallout?* How will the administrators and teachers be involved in the data analysis process? If items force people to be accountable, I wouldn't call that a political problem. If items reflect areas that tend to be sensitive and/or in some way imply shame and blame, probably those items should be removed. There's a fine line between holding people responsible and shaming. When the data tell a story you're trusting people to be adults about what is implied, but sometimes they're not. Maybe the best way to think of it would be to be sure to only ask questions that imply what is happening rather than what is not. To repeat a previous point, perceptions are by definition biased, but we still want to know what they are. Observations are less biased. With enough participants statistical bias will be reduced when items are concrete.

**Q4. Can you think of an item that would map onto emotional safety as opposed to physical safety?**

**John Shindler:** There is no reason that we cannot simply ask questions such as, *do you feel safe from verbal abuse or teasing?* It can be instructive to put ourselves in the place of the student. What causes them to feel either more or less safe and connected? We have an item that related to emotional safety in our student interaction dimension, *do you feel like different groups at the school interact positively?* Another item that we find that is highly correlated is how popular students treat other students. At most schools, it is pretty predictive of the overall climate and sense of cohesion. Does the student feel like someone's got their nose in the air and looking down at them, or are they part of a school that's a little more accepting and where kids look like they are part of the welcoming community rather than part of a hierarchy of haves and have-nots? Items like that can be indirect indicators of feeling like you have emotional safety—things like feeling like you have teachers whom you can talk to. Our items indirectly point to emotional safety. I think most of the instruments you will look at have areas that either directly ask the question or



indirectly ask the question. We have a handful of items that do that. Emotional safety is going to deal with the idea of how students speak to each other, to some degree. We ask a question about whether students accept a level of verbal abuse from each other. *Do students accept a zero tolerance for putdowns or do they accept that verbal abuse is just part of their regular daily experience?* An item like that is pretty general. If you have a lot of students who think that they walk around school and verbal abuse is just the way kids talk, or if you walk around the school and there is a policy that students don't accept put-downs from each other, then you can see that in an item. It's a little difficult to word, but those items are very reliable. The few I mentioned tend to almost always correlate with one another. Another area is how athletes in secondary schools treat the other students. All of those questions give you an idea of the culture at a school and about whether people accept abuse and hierarchal entitlement, or if they expect students of all kinds to be respectful of each other.

- Q5. Some surveys include items to gauge the extent to which students are responding truthfully and/or paying careful attention to the items. For example, one school climate survey has an item that asks whether students have ever done a fictitious drug. If we use this example, what if a large percentage of responding students report that they HAVE done this fictitious drug? How valid can you consider the results to be?**

**John Shindler:** We don't have an item like that. We do have an item that essentially asks the same thing as another item. So we look at those two items and see if we are getting similar responses. If you are getting most of the students who are getting to a particular item and they are answering it in a way that looks like they are lying and not paying attention, my question would be what does the rest of the survey look like? As you examine survey marking patterns, you can usually determine who is paying attention or answering sincerely and who is not. For the most part, when students begin to check out they tend to put responses in a straight line. However, overall, we can be surprised--when we ask a group of students to take a survey that is going to affect the way people think about their school and gives them an opportunity to have their voices heard--they're pretty intentional. Having lie detection items may be helpful, especially if we can't rely on the encouragement of the administrators; however, the survey just got one more item longer with no more useful data being added. If students know that this is important, and an administrator at the school says this is important, I just don't see kids not putting a good effort into their surveys typically. What we find is about 5% of students skim or stop reading. We only toss surveys that place all marks across the top or bottom exclusively.

- Q6. You mentioned how some items measure agreeableness rather than an actual construct. Can you share how you have seen an item revised to be more valid?**

**John Shindler:** What do you want to know of students? Say we want to know how students feel about their teacher's relationship with them, or if their teacher has acceptably high expectations for them. Our observation could be that most of the teachers at school X have pretty low expectations for their students. Maybe it can be the case that the kids think that since teachers are the authority and in their perception they know what they're talking about, and they tell us that we better work harder; we conclude that they have high expectations of us. When asked about expectations on the survey, students rate it pretty high. I say that this kind of perceptual



item is useful, but it is less reliable than something that gets at a concrete indicator of practices that promote high expectations. For example, if we ask, *do your teachers use phrases like X or Y or do your teachers talk to you in X way*, then it achieves one more level of concreteness. In some schools a student might conclude that while they assumed their teachers have high expectations for them, they just can't agree that the teacher uses the high expectation promoting language indicated in the survey. It does take more items if we are going to ask more specific questions. The more concrete we get with the items, the more we move away from perceptions and agreeableness (which can be cultural or class related) and toward a more actual phenomenon in the school.

**Q7. What questions should be considered actionable by schools, since it's hard to tell what messages have been sent or received in the school versus outside? (The question refers to cyber-bullying.)**

**John Shindler:** It is actionable in the sense that the schools create a climate where kids feel disconnected from each other and bullying is part of the culture of the school. If bullying is part of the culture of the school, I think that's where you want to take some form of action. Do you want to keep track of what kids are doing when they are not at school? I could see how that would be problematic, especially making kids feel like the school is being intrusive. I would say if there is cyber-bullying between kids at home, then go to the school and watch for that same bullying at school. I bet you would see the same behavior as well.

**Q8. After piloting questions and revising them after configuring the results, is it advisable to then finalize the survey or do you need to re-pilot?**

**John Shindler:** If you've got completely new items that you put into the survey after you revise it, you probably want to see how those items function before you use them on a broad scale. I would say wait for a chance to pilot test the new version with the revised items even with a relatively small sample.

**Q9. In your experience, how long does it take to see an improvement in school climate data once improvement programs are implemented?**

**John Shindler:** The conventional wisdom is that the first year will involve learning and implementing as well as making changes in the culture of the school. Typically what is found is that not much change is seen from administration one to administration two a year later. However, it is normal to see a real change between administration two and three, and hopefully a steady progress after that. For instance, a charter school that we worked with was very positive about doing a climate survey and was very attentive to the results, but actual change has been slow. The climate data really helped lessen resistance and open the teachers' eyes to what needed to improve, but it has taken time to find and become comfortable with new practices. After a couple of years we are seeing real change. Let me add that there is a leader devoted to the effort and a team of teachers that meet about it too. I would guess that not much would have occurred without the leader and her "climate team." Most likely, we are going to need all these years of the grant funding and facilitation to observe real improvement. If the interventions are haphazard,



I wouldn't expect any change, but if the interventions are sound and are driven by the school climate data, I think you're going to see change. I hope the proposed interventions that are selected are well aligned with our climate data and dealing with conventional wisdom about what the problem is. If we address symptoms, not much will change. If we address the core issues/real problems, and things that people care about and want to commit to, we will see real improvement.

**Q10. What does the research say about the order that the response options should be in, going from negative to positive or positive to negative? Should it start with strongly agree to strongly disagree, or vice versa?**

**John Shindler:** We switched them in our online version and we didn't see any change. There may be a difference, but as far as we have seen there has not been.

**Q11. The number of items to ask, e.g., 30 items for students, I assume is for "paper" surveys. What is the target number of questions for focus groups?**

**John Shindler:** It is hard to pick a number, but anything over 10 and pretty soon we start losing quality. I would say 7 — 10 items would be good. You probably want to have whittled your key concepts down. It is important to get a representative sample of respondents in the group, and get a little bit of discussion and the chance to ask follow-up questions. You need to think about timeframe and make sure you don't spend too much time on any single item. If we ask less than seven questions, the problem is we don't get at some of the things we want to know, and more than 10 and pretty soon it does sound like people just are getting a little bit fatigued from so many questions.

**Q12. Where would school leadership fall in the S3 model or your model?**

**John Shindler:** We have a separate scale related to leadership and decision making at a school. On the S3 framework it would be one of the pervasive factors. It is related to almost all areas. Specific items that imply leadership could be examined as a sub-factor, but leadership is a sensitive area. If the leader feels like the survey is a potential indictment of their performance they may react in a manner that hurts the overall effort. We only include that scale when the leader has agreed beforehand to have it in.

**Q13. We currently use The Hope Survey which includes six constructs. Under "belongingness" it asks students about whether they feel personally supported by their peers. Would this meet the emotional piece?**

**John Shindler:** Yes, that is a good question for getting at emotional safety. We want to know if there is both an absence of factors that kill acceptance, emotional safety and belonging, and the presence of factors that promote acceptance and belonging. Both of those areas would be useful to ask.



**Q14. Will you be discussing how to specifically lay out the questions to get a more accurate or valid answer?**

**John Shindler:** That is complicated and that is why in the last section it has lots of options. There are advantages to all of those options. Laying out questions is important. My experience has been working on the analytic trait scale structure. The last Webinar presenter and the next Webinar presenter will talk about their experience working with Likert scale items. I would say that regardless of the structure that we use, getting at the more concreteness of an item is going to get you better reliability. When you have concreteness and specificity in items then the answer that you get back is much more able to give you a good sense of what is actually happening and something that would apply. That is my experience in terms of getting that structure and reliability, but I would say look at the different options and have that discussion yourself. You might even get a selection of these instruments and try each one for yourself and see how they work. That might be the best way to test them out.

**Q15. Will you be discussing what demographic or student characteristic questions are appropriate to include in order to better understand who the students are that answer a certain way, or crosstab analysis to get a better insight into the unique characteristics of students who respond in a certain way?**

**John Shindler:** We have thought a lot about that. The only ones we ask are grade level and ethnicity questions. I'm sure there are others that would be useful, but whenever we ask demographic questions it sets a tone. If you're asking something that is very common like *what is your grade level*, then those things look relatively familiar to them and they move on. If you're asking other more sensitive questions, the older students may wonder what you're trying to get at, and they can potentially become more suspicious of how the data will be used. The same can be true for parents or teachers. We ask as few as possible. If you have a real question as to whether students who are on free and reduced lunch experience the climate differently, you should include the item, or if teachers who are new perceive the climate differently than experienced teachers. We do not want the start of the survey creating a mindset that there are classes in the school unless it is really valuable. Recently, we surveyed a district that used several demographic items and there was no direct evidence that it affected the way participants responded. However, the lack of variance across groups was notable. That being said, we do find that students from different social and academic strata within a school rate the climate differently. Usually people are surprised that there is little ethnic variation, but a lot more social class variation.

**Q16. When surveying special needs students, do you recommend shorter instruments or just using accommodations and/or modifications? If the latter, what do you recommend?**

**John Shindler:** I would recommend both, but it would have to be a shorter instrument. For the first time, I have a student in my class who is blind. All of the students were taking a learning skills instrument and that student was in the class. So there is a piece of paper that I am handing out to everybody and I have a blind student in the class. What I did was I asked him half of the questions



while everyone else was taking the survey, and when they were done, we stopped and he got a pretty good score from the survey. The accommodation was that I had to ask the questions and the shorter survey was better. There are a lot of reasons why we would want to provide a shorter survey for someone who is getting frustrated by a longer survey, and any accommodations that create clarity of communication would be important. I would encourage you to reach out to your school district administration office. Have an administrator of special services or a director of special education who can give you directions about how to make those accommodations. They in all likelihood will have a policy established and have some directions and technical assistance support in the state Department of Education. In terms of classroom delivery of this survey, I think those would be two good sources to reach out to.

**Q17. Will you discuss how best to use open-ended questions and how to structure those questions in such a way to assist with coding of answers to help with analysis?**

**John Shindler:** We don't do that very much so I don't have a lot of experience with that. If we are asking questions about why did you respond in this particular way, then I think it helps us understand if there is something that the students want to say that they were not asked within the items. The open-ended questions should be primarily in support of the other items, but we get data from open-ended items that are really telling, and can be really helpful when we are putting together our focus group questions and protocol.

**Q18. Has this school climate survey focus been extended to higher education or college settings?**

**John Shindler:** We are working on that, but there are few surveys in this area currently. My guess is that you will see more of it, as the customer-satisfaction mentality grows in higher education.