

Learning With Others: Study of Collaboration Student Survey

The following tables show the student survey items that can be used as item sets to measure desired underlying constructs as indicated. For a copy of the student survey instrument please see [Collaboration Study Measures](#). To obtain information regarding the technical properties of the student survey item sets, please refer to the [Technical Appendix](#).

Section I. Students' Participation in High-Quality Collaborative Experiences

Domain	Constructs	Proposed Items	Question Type/Source
Structural Quality Features of High Quality Collaboration (15 items)	ORGANIZATION Group composition (4)	1. Q22_a_1-5 When you work on a group project, problem, activity, or assignment with other students, how frequently does your group include (never/rarely; some of the time; most of the time; all the time)? <i>My group has...</i> <ol style="list-style-type: none"> a. At least one other student who is the same race or ethnicity as me. b. At least one other student who is a different race or ethnicity as me. c. At least one other student who knows <i>more</i> than me about the topic or skill we are working on. d. At least one other student I feel comfortable working with. 	Descriptive Original items
	ORGANIZATION Established group norms and task clarity (3)	7. Q23_a_1-3 Before you start working on your group project, how often does your math/English teacher clearly explain what you should do and how your group should work together (never/rarely; some of the time; most of the time; all the time)? <i>My teacher clearly explains...</i> <ol style="list-style-type: none"> a. The purpose or goal for our group project, or activity. b. How we are supposed to share responsibility for getting the work done. c. What we are supposed to do when members of our group disagree. 	Descriptive Adapted from Akey (2006), <i>Conduct expectations scale</i> .
	INTERDEPENDENCE Task requires collective effort (3)	8. Q25_a_1-3 When you are working with other students in a group in math/English, how often are the following statements true for your group (never/rarely; some of the time; most of the time; all the time)? <ol style="list-style-type: none"> a. We need every member of our group to take on responsibility for their part of the project or activity. b. We need everyone's ideas if we are going to be successful. c. Credit is based on a combination of our individual work and our group work. 	Descriptive Adapted from Johnson and Johnson (1983). <i>Goal interdependence scale</i> .
	STUDENT CENTERED/ CULTURALLY RESPONSIVE ACTIVITY Task is non-routine, authentic, problem focused and reflects students background culture and lived experiences (4)	9. Q24_a_1-4 What kinds of group projects, problems, activities, and assignments do you work on in your /English class? Rate how often the following statements are true (never/rarely; some of the time; most of the time; every time). <i>Our group projects, activities, and assignments...</i> <ol style="list-style-type: none"> a. Include a topic I know something about. b. Have more than one possible solution or answer. c. Feel as if they are just right level of challenge. d. Feel connected to my life outside school. 	Descriptive Adapted from CCSR (2009). <i>My voice survey</i> .

	Constructs	Proposed Items	Question Type/Source
Dynamic Quality Features of High Quality Collaboration (10 items)	Interactions are responsive, respectful and inclusive (3)	<p>10. Q26_a_4-6 How does your group actually work together? Rate how often the following statements are true for you and your group (never/rarely; some of the time; most of the time; every time).</p> <p><i>When I work with other students in a group in my math/English class...</i></p> <ul style="list-style-type: none"> a. Students carefully listen to each other's points of view. b. Students give compliments to each other on their ideas or solutions. c. Students of different races get along well. 	Descriptive
	Constructive exchange (4)	<p>11. Q27_a_1-4 Rate how often the following statements are true for you when you are working in a group (never/rarely; some of the time; most of the time; every time).</p> <p><i>When I work with other students in a group in my math/English class,...</i></p> <ul style="list-style-type: none"> a. We build off each other's ideas. b. We talk about different solutions or points of view. c. Students feel comfortable disagreeing with each other d. When students share their ideas, other students ask questions or give them feedback. 	Descriptive <i>Adapted from CCSR (2009); My voice survey.</i> Single items from Akey (2006) and Fredricks (2016).
	Shared leadership and decision making (3)	<p>12. Q26_a_1-3 How does your group actually work together? Rate how often the following statements are true for you and your group (never/rarely; some of the time; most of the time; every time).</p> <p><i>When I work with other students in a group in my math/English class,...</i></p> <ul style="list-style-type: none"> a. Students work as a team to plan our group's work. b. All members of our group have a say in team decisions. c. Our teacher talks through group decisions with us. 	Descriptive <i>Original Items</i>
	Student felt included, liked and accepted by group and social comfort (6)	<p>13. Q29_a_1-6 How often do you feel this way? Rate how often the following statements are true for you (never/rarely; some of the time; most of the time; every time).</p> <p><i>When I work in a group in math/English class,...</i></p> <ul style="list-style-type: none"> a. Other students include me in decisions. b. Other students ask for my opinion. c. Other students appreciate the work I do for our group. d. I feel comfortable sharing my ideas with the group. e. I feel as if it is okay to make mistakes in front of others in my group. f. I feel comfortable asking questions if I don't understand something. 	Attitude Adapted from. Patrick, Ryan, and Kaplan (2007) and Johnson, Johnson, and Anderson (1983). Also adapted from Micari and Drane (2011), Social comfort scale.

Section II: Student Perceptions of Classroom

Domain	Constructs	Proposed Items	Question Type/Source
Social-Emotional Support and Connection (14 items)	Perceived Peer Support = 3 items		
	Student believes peers provide emotional support (4)	<p>1. Q16_a_1-4 How much do you agree with the following statements (don't agree; agree a little; mostly agree; agree a lot)?</p> <p><i>In my math/English class...</i></p> <ul style="list-style-type: none"> a. I get along with most of the students in my class. b. Other students will take time to answer my questions, even if we are not friends. c. Another student would try to help me feel better if I was upset. d. Other students notice when I am good at something. 	<p>Attitude/Perception</p> <p>Adapted from Johnson, Johnson and Anderson (1983). <i>Peer personal support scale</i>; and <i>Peer academic support scale</i></p>
	Absence of Microaggression, Exclusion, and Social Comparison Concerns = 11 items		
Social comparison concerns (Reverse) (4)	<p>2. Q40_a_1-4 How much do you agree with the following statements (never/rarely; some of the time; most of the time; all of the time)?</p> <p><i>In my math/English class...</i></p> <ul style="list-style-type: none"> a. I feel as if I have to careful about what I say and how I say it. b. I feel as if I just don't fit in with the other people in my class. c. I feel hesitant to share my ideas with others in the class. d. I leave the class feeling as if I am the only one who didn't understand the material well. 	<p>Attitude/Perception</p> <p>Adapted from the following:</p> <ul style="list-style-type: none"> • Micari and Drane (2011). <i>Social comparison concerns scale</i>. • Hansen & Larson (2005). 	

Domain	Constructs	Proposed Items	Question Type/Source
Opportunities and Expectations for Learning (6 items)	Teacher Expectations for Learning = 3 items		
	Perceived expectations for learning (from teacher) (3)	<p>3. Q18_a_1-3 How much do you agree with the following statements about your math/English teacher (don't agree; agree a little; mostly agree; agree a lot)? <i>My math/English teacher...</i></p> <ul style="list-style-type: none"> a. Expects me to do well in this course. b. Expects me to work harder than I thought I could. c. Doesn't let me give up when the work is hard. 	Attitude/Perception Adapted from Haynes et al. (2016). <i>Teacher expectations for learning scale.</i>
	Learning With Peers = 3 items		
Student believes that he or she learns from and with peers (3)	<p>6. Q15_a_1-3 How much do you agree with the following statements (don't agree; agree a little; mostly agree; agree a lot). <i>In my math/English class,...</i></p> <ul style="list-style-type: none"> a. I talk with other students about my coursework to help me understand things better. b. Other students give me helpful feedback on my work. c. When students share their ideas or work, I ask them questions to learn more about it. 	Attitude/Perception Adapted from Akey (2006). <i>Active learning strategies scale.</i>	

Domain	Constructs	Proposed Items	Question Type/Source
Personalization (8 items)	Perceived teacher support for individual needs and cultural sensitivity (4)	<p>7. Q18_a_4-7 How much do you agree with the following statements about your math/English teacher (don't agree; agree a little; mostly agree; agree a lot)? <i>My math/English teacher...</i></p> <ul style="list-style-type: none"> a. Helps me figure out how I learn best. b. Gives me useful feedback on my work. c. Is respectful of differing religions and cultures. d. Helps me connect what I am learning in class with my life outside of school. 	<p>Attitude/Perception <i>Original items</i> <i>Also adapted from the following:</i></p> <ul style="list-style-type: none"> • Haynes et al. (2016). <i>Perceived teacher support scale.</i> • Guo, Choe, and Higgins-D'Alessandro (2011). <i>School climate inventory—support for learning scale.</i>
	Student believes individual learning needs are being met (4)	<p>8. Q14_a_1-4 What is it like for you in your math/English class? How much do you agree with the following statements (don't agree; agree a little; mostly agree; agree a lot)? <i>In math/English class,...</i></p> <ul style="list-style-type: none"> a. I get to learn in the ways that work best for me. b. I do work that is the right level of challenge for me (not too hard or not too easy). c. I get to do work that I am interested in and that matters to me. d. I feel as if my individual learning needs are met. 	<p>Attitude/Perceptions <i>Original items</i></p>

Section III. Student Mind-sets and Dispositions

	Construct	Proposed Items	Question Type/Source
Engagement (7 items)	Emotional Engagement (3)	<p>1. Q10_a_1-3 How do you feel about your math/English class? Tell us how much you agree with the following statements (don't agree; agree a little; mostly agree; agree a lot).</p> <p>a. I look forward to coming to my math/English class.</p> <p>b. Sometimes I get so interested in my math/English coursework that I don't want to stop.</p> <p>c. I care a lot about what I am learning in my math/English class.</p>	<i>Original items, and items adapted from Haynes et al. (2016) and CCSR (2009).</i>
	Behavioral Engagement (4)	<p>2. Q11_a_1-4 How do you go about your work in your math/English class? Rate how often the following statements are true for you (never or almost never; sometimes; most of the time; all the time).</p> <p><i>During my math/English class,...</i></p> <p>a. I stay focused on my work.</p> <p>b. I complete my coursework on time.</p> <p>c. I put effort into my learning.</p> <p>d. I keep trying even if something is hard.</p>	<p>Self-Report of Behavioral Engagement</p> <ul style="list-style-type: none"> Adapted from Fredricks et al (2016). <i>Behavioral Engagement scale.</i> Adapted from Haynes et al (2016). <i>Cognitive Engagement/SRL.</i>
Intrinsic Motivation (7 items)	Task Valuing (4)	<p>3. Q12_a_1-4 How much do you agree with the following statements (don't agree; agree a little; mostly agree; agree a lot)?</p> <p><i>What I am learning in my math/English course...</i></p> <p>a. Is useful for my life right now.</p> <p>b. Will be useful to me in my other high school classes.</p> <p>c. Will be useful for my learning after high school (e.g., in college or job training).</p> <p>d. Will be useful for my future career.</p>	<p>Attitude/Belief</p> <p><i>Adapted from Haynes et al (2016).</i></p>
	Mastery orientation (2)	<p>4. Q10_a_4-6 How do you feel about your math/English class? Tell us how much do you agree with the following statements (don't agree; agree a little; mostly agree; agree a lot).</p> <p>a. I try to learn from my mistakes in my math/English classwork.</p> <p>b. It's important to me that I improve my math/English skills this year.</p>	<p>Attitude/Belief</p> <p><i>Adapted from the following:</i></p> <ul style="list-style-type: none"> Pintrich, Smith, Garcia, and McKeachie (1991). <i>Intrinsic goals orientation scale.</i> Midley et al. (2000). <i>PALS survey, mastery orientation scale.</i>

	Construct	Proposed Items	Question Type/Source
Self-Efficacy/Sense of Competence (7 items)	Academic Self-Efficacy (4)	<p>5. Q13_a_1-4 How much do you agree with the following statements about yourself in math/English (don't agree; agree a little; mostly agree; agree a lot)?</p> <p>a. I can learn the material in my math/English class, if I put in enough effort.</p> <p>b. I know I can do well on my math/English test or assessment, even if it is hard.</p> <p>c. I believe I can master the skills taught in my math/English class.</p> <p>d. I expect to do well in my math/English class this year.</p>	<p>Attitude/Belief Adapted from Haynes et al. (2016). <i>Academic self-efficacy scale</i>.</p>
	Social Self-Efficacy (3)	<p>6. Q15_a_4-6 How much do you agree with the following statements (don't agree; agree a little; mostly agree; agree a lot)? <i>In my math/English class,...</i></p> <p>a. It is easy for me to start a conversation with another student about what we are learning in class</p> <p>b. I can explain my point of view about what I am learning with other students in my class.</p> <p>c. I can work well with other students in my class.</p>	<p>Attitude/Belief Adapted from Patrick and Ryan (2003). <i>Social self-efficacy scale</i>.</p>

Student Survey Instrument Sources

Author/Source	Instrument/Scale
1. Akey, T. M. (2006). School context, student attitudes and behavior, and academic achievement. New York, NY: MDRC. Retrieved from: https://www.mdrc.org/publication/student-context-student-attitudes-and-behavior-and-academic-achievement	Student Attitudes and Behavior Scales: conduct expectations scale; active learning strategies scale
2. Consortium on Chicago School Research (2009). <i>My school, my voice: high school senior survey</i> . Retrieved from http://ccsr.uchicago.edu/downloads/23532009_my_voice_senior_student_code_book.pdf	Academic engagement scale
3. Fredricks, J., Wang, M. T., Linn, J. S., Hofkens, T. L., Sung, H., Parr, A., & Allerton, J. (2016). Using qualitative methods to develop a survey measures of math and science engagement. <i>Learning and instruction, 43</i> , 5-15.	Behavioral cognitive engagement and emotional engagement scales
4. Guo, P., Choe, J., & Higgins-D'Alessandro, A. (2011). Report of construct validity and internal consistency finding for the comprehensive school climate inventory. Bronx, NY: Fordham University.	School climate inventory: support for learning scale
5. Hansen, D., & Larson, R. (2005). <i>The Youth Experience Survey. 2.0. Instrument revisions and validity testing</i> . Unpublished manuscript, University of Illinois at Urbana-Champaign. Retrieved from: http://youthdev.illinois.edu/wp-content/uploads/2013/11/YES-2.0-Instrument.pdf .	Negative group dynamics scale
6. Haynes, E., Zeiser, K., Surr, W., Hauser, A., Clymer, L., Walston, J., & Yang, R. (2016). <i>Looking under the hood of competency-based education: The relationship between competency-based education practices and students' learning skill, behaviors, and dispositions</i> . Quincy, MA: The Nellie Mae Education Foundation.	Teacher expectations for learning scale; perceived teacher support scale; cognitive Engagement-self-regulated learning scale; academic self-efficacy scale
7. Johnson, D. W., & Johnson, R. T. (1983). Social interdependence and perceived academic and personal support in the classroom. <i>Journal of Social Psychology, 120</i> , 77-82.	Goal interdependence scale

Author/Source	Instrument/Scale
8. Johnson, D.W., Johnson, R., & Anderson, D. (1983). Social interdependence and classroom climate. <i>Journal of Psychology</i> , 114, 135-142.	Peer personal support scale; peer academic support scale
9. Micari, M., & Drane, D. (2011). Intimidation in small learning groups: The roles of social-comparison concern, comfort, and individual characteristics in student academic outcomes. <i>Active Learning in Higher Education</i> , 12(3), 175-187.	Social comfort scale; social comparison concerns scale
10. Midley, C., Maehr, M., Hruda, L., Anderman, E., Anderman, L., Freeman, K. Gheen, M., Kaplan, A., Kumar, R., Middleton, M., Nelson, J., Roeser, R., & Urdan, T. (2000). <i>Manual for the patterns of adaptive learning scales</i> . University of Michigan. Retrieved from: http://www.umich.edu/~pals/PALS%202000_V13Word97.pdf	PALS survey, mastery orientation scale
11. Patrick, H., & Ryan, A. (2003). <i>Identifying adaptive classrooms: analyses of measures of dimensions of the classroom social environment</i> . Paper prepared for the Positive Outcomes conference. Washington, DC: Child Trends.	Classroom social environment scales; social self-efficacy scale
12. Patrick, H., Ryan, A. M., & Kaplan, A. (2007). Early adolescents' perceptions of the classroom social environment, motivational beliefs, and engagement. <i>Journal of Educational Psychology</i> , 99(1), 83-98. http://dx.doi.org/10.1037/0022-0663.99.1.83	Social efficacy with peers scale
13. Pintrich, P., Smith, D., Garcia, T., & McKeachie, W. (1991). <i>A manual for the use of the motivated strategies for learning questionnaire (MSLQ)</i> . Ann Arbor, MI: National Center for Research to Improve Postsecondary Teaching and Learning.	Intrinsic goals orientation scale
14. Torres-Harding, S., Andrade, A.L., & Diaz, C.E.R. (2012). The racial microaggressions scale: a new scale to measure experiences of racial microaggressions in people of color. <i>Cultural Diversity and Ethnic Minority Psychology</i> , 18(2), 153-164.	Racial microaggression scales
15. Williams, D.R., Yu, Y., Jackson, J.S., & Anderson, N.B. (1997). Racial differences in physical and mental health: socioeconomic status, stress, and discrimination. <i>Journal of Health Psychology</i> , 2(3), 335-351.	Heightened vigilance scale