

A photograph of three young adults sitting outdoors and smiling. A woman with long dark hair is on the left, a man with dark curly hair is in the center, and a woman with blonde hair is on the right. They are all looking towards each other and appear to be in a friendly conversation. The background shows a blurred outdoor setting with greenery and a concrete wall.

# Measuring Students' Social and Emotional Learning: A Review of Instruments and Implications for State and Local Education Agencies



Hosted by the Social and Emotional Research Alliance  
November 20, 2019

# Agenda

Welcome & Introductions

Overview of Findings from *A Review of Instruments for Measuring Social and Emotional Learning Skills Among Secondary School Students*

Facilitated Q&A

Wrap-up & Evaluation

# Meet today's presenters



Dr. Julie Riordan  
Director  
REL Northeast & Islands



Josh Cox  
Researcher/SEL Research Alliance  
Co-Lead  
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Champlain Valley School  
District



Cassandra Townshend  
Director of Behavior Systems  
Champlain Valley School District



# Today's goals

- Learn about the availability of instruments measuring collaboration, perseverance, and self-regulated learning in secondary school students
- Learn about the intended uses of the instruments
- Learn about the availability of reliability and validity information for the instruments
- Explore implications of the information presented, including how a local education agency can use the resource



# Social Emotional Learning Research Alliance

The alliance supports state and district leaders as they seek to identify and synthesize emerging evidence about SEL measures and interventions to inform their own policies and practices.

Alliance members' priority research topics include measurement, supports for SEL in and out of school (family and community engagement), instructional strategies, and professional learning.





# OVERVIEW OF FINDINGS

## *A review of instruments for measuring social and emotional learning skills among secondary school students*



# Background

- This study was conducted in partnership Champlain Valley School District (CVSD) in Vermont.
- CVSD has been focused on implementing proficiency-based learning and personalized learning plans for quite some time.
- As part of this work, CVSD is implementing standards related to social and emotional learning (SEL) skills.
- To help them measure and track students' SEL skills, CVSD was interested in research that would help inform the development of its assessment systems, both formative and summative.



# CVSD's mission statement

**THE CSSU MISSION IS TO DEVELOP CITIZENS WHO...**





# Final constructs/definitions

## Self-direction:

- a. Take initiative in, and responsibility for, **learning**
- b. Set goals, make informed decisions, and take constructive risks
- c. Demonstrate a growth mindset by **persevering when challenged**

## Self-regulated Learning:

“tak[ing] initiative in, and responsibility for, learning”

## Perseverance:

“**persevering when challenged,**” dealing with failure in a positive way, seeking to improve one’s performance

## Responsible and Involved Citizenship:

- a. Participate and **collaborate effectively and respectfully to enhance the learning environment**
- b. Take responsibility for personal decisions and actions
- c. Demonstrate a respect for differing cultures, values, and points of view

## Collaboration:

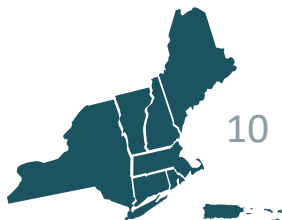
“**collaborat[ing] effectively and respectfully to enhance the learning environment**”



# Purpose

This resource will support stakeholders to:

- Identify available instruments for measuring collaboration, perseverance, and self-regulated learning
- Understand information about reliability and validity that is available for each of these instruments



# Reliability and validity

This report indicates whether information was available for:

## Reliability

Refers to whether the instrument consistently measures the skill across respondents, time, or raters.

## Validity (7 components)

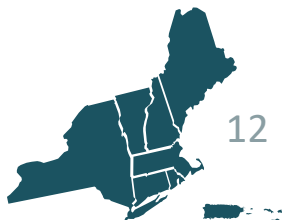
Refers to whether an instrument measures what it intends to measure and whether the inferences made from the instrument are appropriate.

- (1) Content validity
- (2) Substantive validity
- (3) Structural validity
- (4) External validity
- (5) Generalizability validity
- (6) Consequential validity
- (7) Fairness



# Eligibility criteria

- Measures one of the three targeted SEL skills: collaboration, perseverance, and self-regulated learning
- Used with a population of secondary school students (students in grades 9–12) in the U.S.
- Is publicly available online at no or low cost
- Is published or had psychometric validation work completed between 1994 and 2017
- Not published as part of a doctoral dissertation



# What instruments did we find?

## Collaboration

- 3 student self-report surveys
- 1 performance-based assessment
- 1 teacher-report survey

## Perseverance

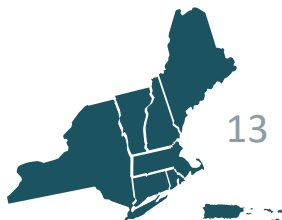
- 4 student self-report surveys

## Self-regulated learning

- 4 student self-report surveys

## Perseverance and self-regulated learning

- 3 student self-report surveys

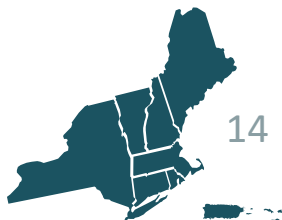




# What were the intended purposes of the instruments?

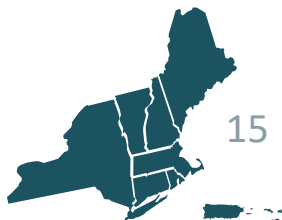
Among the 16 instruments identified:

- 11 were developed for use in research
- 5 were developed for formative instruction
- None of the information collected suggests that any of the instruments should be used for summative purposes



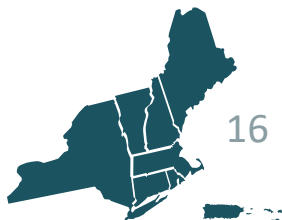
# Instruments for measuring **collaboration**:

Instrument Name	Intended Purpose
Revised Self-Report Teamwork Scale	Research
Teamwork Scale	Formative
Teamwork Scale for Youth	Research
Subjective Judgement Test	Research
Teacher-Report Teamwork Assessment	Research



# Instruments for measuring perseverance:

Instrument Name	Intended Purpose
Engagement with Instructional Activity	Research
Expectancy-Value-Cost Scale	Formative
Grit Scale—Original Form	Research
Grit Scale—Short Form	Research



# Instruments for measuring **self-regulated learning**:

Instrument Name	Intended Purpose
Inventory of Metacognitive Self-Regulation on Problem-Solving	Research
Junior Metacognitive Awareness Inventory	Formative
Self-Directed Learning Inventory	Research
Self-Regulation Strategy Inventory	Formative



# Instruments for measuring **perseverance AND self-regulated learning:**

Instrument Name	Intended Purpose
Motivated Strategies for Learning Questionnaire	Formative
Program for International Student Assessment Student Learner Characteristics as Learners	Research
Student Engagement Instrument	Research



# Findings: Availability of reliability and validity information

Instrument	Validity							
	Reliability	Content	Structural	External	Consequential	Generalizability	Fairness	Substantive
Revised Self-Report Teamwork Scale	●	●	●	●	●	●	●	○
Subjective Judgement Test	●	●	●	●	●	●	●	○
Expectancy-Value-Cost Scale	●	●	●	●	●	●	●	○
Teacher-Report Teamwork Assessment	●	●	○	●	●	●	○	○
Teamwork Scale for Youth	●	●	●	●	○	●	○	○
Grit Scale—Original Form	●	●	●	●	●	○	○	○
Grit Scale—Short Form	●	●	●	●	●	○	○	○
Student Engagement Instrument	●	●	●	●	●	○	○	○
Self-Directed Learning Inventory	●	●	●	●	●	○	○	○
Teamwork Scale	●	●	●	●	●	○	○	○
Self-Regulation Strategy Inventory—Self-Report	●	●	○	●	●	○	○	○
Junior Metacognitive Awareness Inventory	●	●	●	○	●	○	○	○
Motivated Strategies for Learning Questionnaire	●	●	●	●	○	○	○	○
Program for International Student Assessment Student Learner Characteristics as Learners	●	●	●	○	○	○	○	○
Inventory of Metacognitive Self-Regulation on Problem-Solving	●	●	○	○	○	○	○	○
Engagement with Instructional Activity	●	●	○	○	○	○	○	○

● Information is available. ○ Information is not available.

# Findings: Availability of reliability and validity information

Information for **substantive validity** is necessary to help understand whether respondents process the content of items from a measure as the developers intended.

Instrument	Reliability	Content	Structural						Substantive
Revised Self-Report Teamwork Scale	●	●	●						○
Subjective Judgement Test	●	●	●						○
Expectancy-Value-Cost Scale	●	●	●						○
Teacher-Report Teamwork Assessment	●	●	○	●	●	●	○		○
Teamwork Scale for Youth	●	●	●	●	○	●			○
Grit Scale—Original Form	●	●	●	●	●	○	○		○
Grit Scale—Short Form	●	●	●	●	●	○	○		○
Student Engagement Instrument	●	●	●	●	●	○	○		○
Self-Directed Learning Inventory	●	●	●	●	●	○	○		○
Teamwork Scale	●	●	●	●	●	○	○		○
Self-Regulation Strategy Inventory—Self-Report	●	●	○	●	●	○	○		○
Junior Metacognitive Awareness Inventory	●	●	●	○	●	○	○		○
Motivated Strategies for Learning Questionnaire	●	●	●	●	○	○	○		○
Program for International Student Assessment Student Learner Characteristics as Learners	●	●	●	○	○	○	○		○
Inventory of Metacognitive Self-Regulation on Problem-Solving	●	●	○	○	○	○	○		○
Engagement with Instructional Activity	●	●	○	○	○	○	○		○

● Information is available. ○ Information is not available.

# Findings: Availability of reliability and validity information

Information on **fairness** is necessary to understand whether the measure is valid for comparing scores between subgroups of students.

Instrument	Reliability	Content	Stability	Construct	Criterion	Concurrent	Longitudinal	Fairness	Substantive
Revised Self-Report Teamwork Scale	●	●						●	○
Subjective Judgement Test	●	●						●	○
Expectancy-Value-Cost Scale	●	●						●	○
Teacher-Report Teamwork Assessment	●	●	○	●	●			○	○
Teamwork Scale for Youth	●	●	●	●	○	●		○	○
Grit Scale—Original Form	●	●	●	●	●	○		○	○
Grit Scale—Short Form	●	●	●	●	●	○		○	○
Student Engagement Instrument	●	●	●	●	●	○		○	○
Self-Directed Learning Inventory	●	●	●	●	●	○		○	○
Teamwork Scale	●	●	●	●	●	○		○	○
Self-Regulation Strategy Inventory—Self-Report	●	●	○	●	●	○		○	○
Junior Metacognitive Awareness Inventory	●	●	●	○	●	○		○	○
Motivated Strategies for Learning Questionnaire	●	●	●	●	○	○		○	○
Program for International Student Assessment Student Learner Characteristics as Learners	●	●	●	○	○	○		○	○
Inventory of Metacognitive Self-Regulation on Problem-Solving	●	●	○	○	○	○		○	○
Engagement with Instructional Activity	●	●	○	○	○	○		○	○

● Information is available. ○ Information is not available.

# Findings: Availability of reliability and validity information

Information for **generalizability** is necessary to understand whether scores for the instrument are correlated with other modes of measurement for the same skill.

Instrument	Reliability					Generalizability	Fairness	Substantive
Revised Self-Report Teamwork Scale	●					●	●	○
Subjective Judgement Test	●					●	●	○
Expectancy-Value-Cost Scale	●	●	●	●	●	●	●	○
Teacher-Report Teamwork Assessment	●	●	○	●	●	●	○	○
Teamwork Scale for Youth	●	●	●	●	○	●	○	○
Grit Scale—Original Form	●	●	●	●	●	○	○	○
Grit Scale—Short Form	●	●	●	●	●	○	○	○
Student Engagement Instrument	●	●	●	●	●	○	○	○
Self-Directed Learning Inventory	●	●	●	●	●	○	○	○
Teamwork Scale	●	●	●	●	●	○	○	○
Self-Regulation Strategy Inventory—Self-Report	●	●	○	●	●	○	○	○
Junior Metacognitive Awareness Inventory	●	●	●	○	●	○	○	○
Motivated Strategies for Learning Questionnaire	●	●	●	●	○	○	○	○
Program for International Student Assessment Student Learner Characteristics as Learners	●	●	●	○	○	○	○	○
Inventory of Metacognitive Self-Regulation on Problem-Solving	●	●	○	○	○	○	○	○
Engagement with Instructional Activity	●	●	○	○	○	○	○	○

● Information is available. ○ Information is not available.

# Worksheet for Schools/Districts – Step 1

**Step 1. Indicate your response for each of the following questions. Be as specific as possible.**

What are the specific skills to be measured? That is, are you are interested in measuring collaboration, perseverance, or self-regulated learning?

What is the target group of respondents (for example, all high school students)?

What is the purpose for using an instrument (for example, to provide support to teachers)?



# Worksheet for Schools/Districts – Step 2

Question	Response and considerations
Is it important that students were involved in the instrument’s development process?	<input type="checkbox"/> Yes <input type="checkbox"/> No If yes, consider that this resource found no information on <b>substantive validity</b> for any of the instruments reviewed.
Are you interested in using scores from the instrument along with instruments that measure other related social and emotional learning skills?	<input type="checkbox"/> Yes <input type="checkbox"/> No If yes, consider examining information presented in appendix B for <b>external validity</b> to check whether scores generated from the instrument are related to scores from other conceptually similar instruments of social and emotional learning skills.
Are you interested in measuring a specific social and emotional learning skill using more than one mode of measurement, such as student self-report surveys and observations?	<input type="checkbox"/> Yes <input type="checkbox"/> No If yes, consider examining information presented in appendix B for <b>generalizability validity</b> to see if analyses were undertaken to establish whether scores from the instrument are correlated with other modes of measurement of the same social and emotional learning skill.
Are you interested in connecting your students’ social and emotional learning skill scores to other consequential outcomes, such as achievement scores, graduation rates, and attendance?	<input type="checkbox"/> Yes <input type="checkbox"/> No If yes, consider information presented in appendix B for <b>consequential validity</b> and table 4 in the main text. Specifically, examine whether scores from the instrument are correlated with other desired student outcomes.
Are you interested in comparing scores on the instrument for different subgroups of students (for example, by race/ethnicity, eligibility for the national school lunch program, or English learner student status)?	<input type="checkbox"/> Yes <input type="checkbox"/> No If yes, consider examining information presented in appendix B for <b>fairness</b> to see whether information is available about the specific subgroups you are comparing.



# FACILITATED QUESTION AND ANSWER SESSION

**Jeff Evans**

Director of Learning and Innovation  
Champlain Valley School District

**Cassandra Townshend**

Director of Behavior Systems  
Champlain Valley School District



# CVU's Evolution w/SEL During Study

- **Engagement Survey**
  - All students 2x per year
  - Scoring range of +8 to -8
  - Analysis of deficit vs protective factors
  - Response plan
- **RISE**
  - Personalized learning experience
  - Aligned w/ RIC & SD leaves
- **Adoption of CASEL Competencies**
  - Self awareness
  - Social awareness
  - Self management
  - Relationship skills
  - Responsible decision making



# Intersection with REL report

- **Engagement Survey**
  - Build tools from report into response plan to glean more information
- **RISE**
  - Use report to inform revisions of targets, scales, and assessments
- **CASEL Work**
  - Align tools with competencies
  - Embed tools within instructional design



# Questions



# We listen to you!



Your feedback is essential to our work.  
Please [take our survey](#) to help us improve.



# To contact today's presenters

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