



Measuring Student Engagement as an Indicator of Student Agency and Voice within the Classroom Environment

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“ If students are not engaged, there is little, if any, chance that they will learn what is being addressed in class. ”

Heflebower, Marzano, & Pickering, 2011
The Highly Engaged Classroom: the Classroom Strategies Series



Student Engagement Matters

Disengaged	Engaged
53% of US students (Gallup, 2018); steady decline from 5 th to 10 th grades	74% of 5 th grade students
Higher dropout rate	Lower dropout rate
700% more likely to be discouraged about their future	200% more likely to attend college
More likely to be disruptive, off-task, tardy or absent	Experience higher level of academic success, attendance, pro-social behaviors
More likely to become adults who place little value on active citizenship, lifelong learning, responsibility for self	Significant predictor of continuing motivation and commitment in their careers; higher overall performance in college





Survey Design

What is measured

Design Purpose

“The Student Engagement Survey’s primary purpose is to delve deeper into student’s learning experiences by collecting direct feedback from students regarding their level and quality of engagement in the learning process. In addition to elevating the importance of student voices, this survey provides additional information and actionable data for school staff to use to improve teaching and learning.”

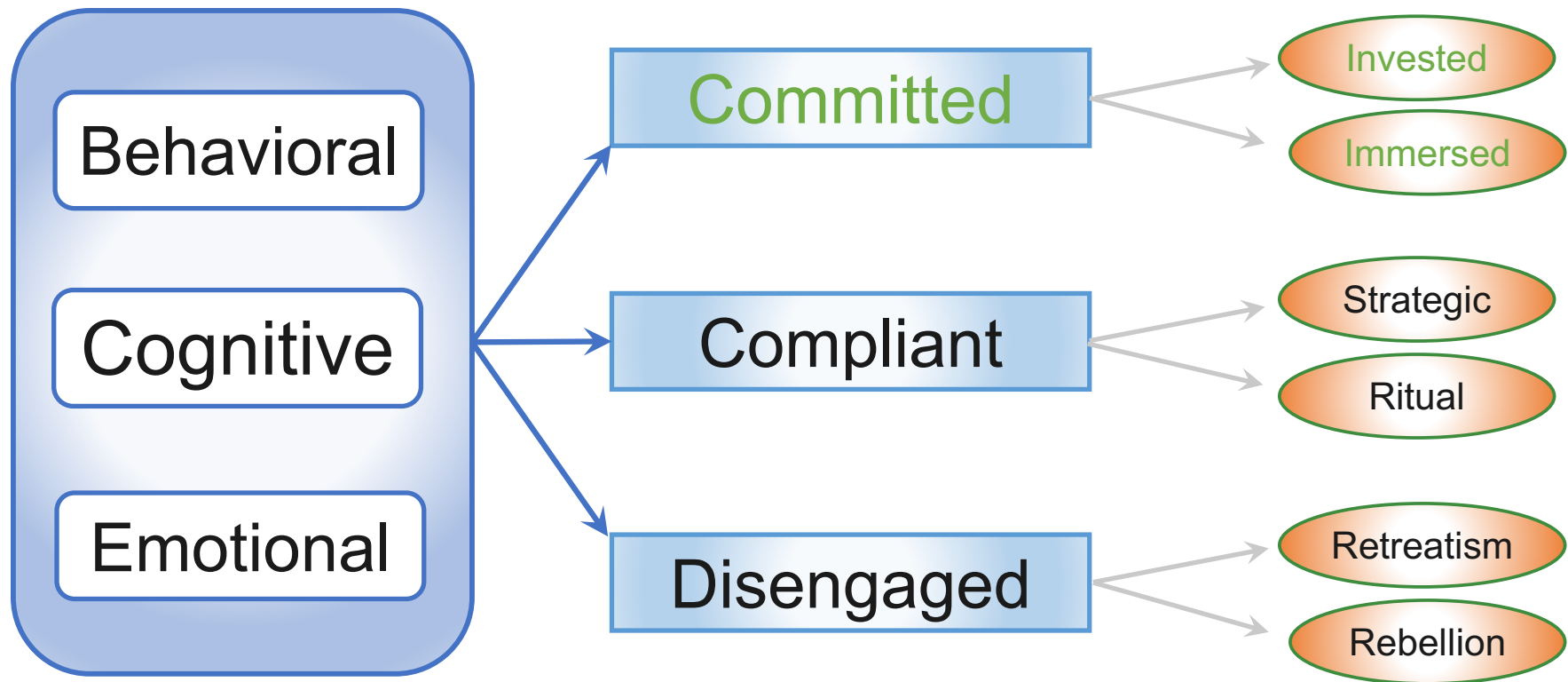
-- Innovation Lab, Cognia



Three Domains

Types of Engagement

Levels



Three Domains of Student Engagement

Behavioral

Cognitive processing a student brings to academic tasks as well as the amount and type of strategies a student utilizes

Identification with academics, intrinsic/extrinsic motivation, and self-efficacy

Perceptions and beliefs associated with school and learning

Behavior or effort in classroom

Cognitive

Observable actions or participation while at school that is investigated through a student's positive conduct, effort and participation

Investment in learning, time on task, homework completion

Engaging in class activities, relevance of schoolwork, value of learning, etc.

Emotional

Feelings toward school, learning, teachers, and peers

Enjoyment of and sense of belonging to a school

Identification with school; feeling of connectedness



Benefits of the Cognia Student Engagement Survey (SES)

- Domains can be measured holistically or separately to understand what students' are saying about engagement
- Results lead to school/school district discussions/decision-making
- Helps with identification of engagement trends across a school or school district
- Can be administered several times a year to provide student voice opportunities
- Use SES data with other Cognia tools to understand engagement (families, parents, community)





Actions and Results

Instrument History and Use

- Accountability SES 1.0
 - Operational use in 2018-19 three state-wide implementations for ESSA accountability purposes
 - Field tested in (2016-17)
 - Use restricted for accountability purposes
 - For security, uses slightly different items than SES 2.0
- Membership SES 2.0
 - Operational 2019-2020
 - Pilot tested 2018-2019
 - Extremely high internal item correlations to domain construct



Methodology: SES v1

- Piloted in 2016-17 school year
- Total sample: 20,494 students across three states
 - Alabama, South Carolina and North Dakota
- School Types: High (6,514), Middle (6,880) and Elementary (7,100)
- Disaggregation by: School Level (Elementary, Middle and High), Gender, Race/Ethnicity, Special Needs, Free/Reduced Lunch, English Learner



Student Engagement Survey Reliability (SES 1.0): *

School Type	Reliability
High School	0.80
Middle School	0.80
Elementary School	0.67



*Reliability was tested using Cronbach's Alpha, with values of .7 and above representing adequate internal consistency

Student Engagement Survey Construct Validity (SES 1.0): *

SCHOOL TYPE	RMSR	RMSEA	GFI	CFI	NFI
High School	0.0132	0.0339	0.9795	0.9420	0.9341
Middle School	0.0133	0.0342	0.9770	0.9385	0.9341
Elementary School	0.0095	0.0259	0.9860	0.9422	0.9311

*Construct validity was examined using confirmatory factor analysis (CFA).

All values in the Table represent **good fit of the data to the model across all of the fit indices**.



Committed Level Changes (v1)

School Comparisons	Behavior	Cognitive	Emotional
Elementary to Middle	-19%	-17%	-27%
Elementary to High School	-17%	-9%	-14%
Middle to High school	2%	8%	14%



Middle School Students (v1)

School Type	Behavior Committed- level	Cognitive Committed- level	Emotional Committed-level
Elementary	88%	61%	70%
Middle	69%	43%	42%
High School	71%	52%	56%

- Elementary school reports the highest levels of engagement for students' K-12 experience
- Committed level of engagement significantly drops from elementary to middle school across all domains



Methodology: SES 2.0

- Completed in Summer 2019
 - 20 institutions participated
 - Geographically dispersed
 - Elementary, Middle and High Schools
 - n= 2,348 students

Data and Reporting

- Accountability Focus
 - Use of Results in Accountability Model
 - School Quality Indicator
 - Reporting
 - Engagement Levels
- Improvement Focus
 - School focus with comparisons
 - Total levels of commitment, compliant, disengaged
 - Engagement and Level
 - Subgroup results

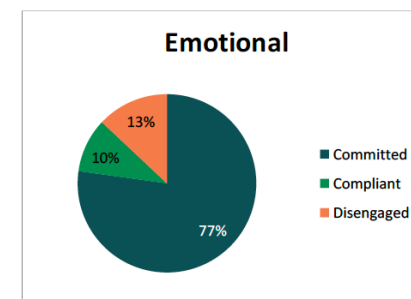
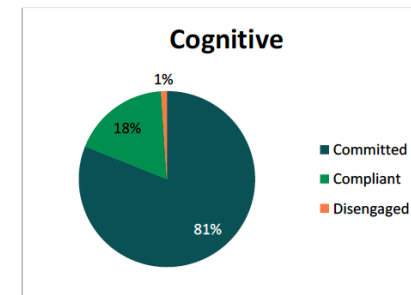
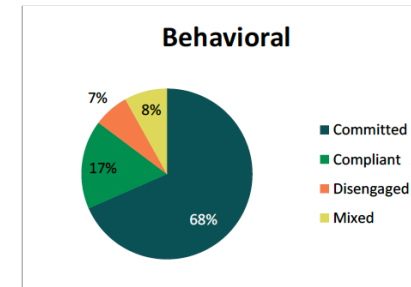


Data and Reporting

School Engagement Profile Summary

Engagement Domains	Levels of Engagement							
	Committed		Compliant		Disengaged		Mixed	
	n	%	n	%	n	%	n	%
Behavioral	195	68%	48	17%	19	7%	23	8%
Cognitive	231	81%	51	18%	3	1%	0	0%
Emotional	220	77%	28	10%	37	13%	0	0%
Total number of students who responded = 285								

ENGAGEMENT PROFILE BY DOMAIN
ELEMENTARY SCHOOL



ENGAGEMENT LEVEL

Behavioral Engagement	
Level of Commitment	Percent
Invested	29%
Immersed	71%
Level of Compliance	Percent
Strategic	48%
Ritual	52%
Level of Disengagement	Percent
Retreatism	89%
Rebellion	11%

Cognitive Engagement	
Level of Commitment	Percent
Invested	28%
Immersed	72%
Level of Compliance	Percent
Strategic	90%
Ritual	10%
Level of Disengagement	Percent
Retreatism	67%
Rebellion	33%

Emotional Engagement	
Level of Commitment	Percent
Invested	52%
Immersed	48%
Level of Compliance	Percent
Strategic	57%
Ritual	43%
Level of Disengagement	Percent
Retreatism	78%
Rebellion	22%

Taking Action

- Through the lens of learners
- Data disaggregation
 - District
 - School
 - Classroom
- Disengaged
- Compliant
- Committed



Questions

Thank you for your attendance and interest.

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