# How to Use the SEI to Increase Student Engagement

Eileen A. Klemm, M.A., Ph.D. Candidate University of Minnesota







INSTITUTE on COMMUNITY INTEGRATION



University of Minnesota

Driven to Discover

# **SEI Overview**

- Student self-report survey
- Development based on the Check & Connect model of engagement
  - Academic
  - Behavioral
  - Affective
  - Cognitive



#### **SEI Validation**

# SEI- validated for students in 6<sup>th</sup>-12<sup>th</sup> grade

Appleton, J.J., Christenson, S.L., Kim, D., & Reschly, A. (2006). Measuring cognitive and psychological engagement: Validation of the Student Engagement Instrument. Journal of School Psychology, 44, 427-445.

# SEI-Elementary

Carter, C. P., Reschly, A. L., Lovelace, M. D., Appleton, J. J., & Thompson, D. (2012). Measuring student engagement among elementary students: Pilot of the student engagement instrument-elementary version. *School Psychology Quarterly, 27*(2), 61-73.



# **SEI Affective Engagement Measures**

SEI (6<sup>th</sup>- 12<sup>th</sup>)

- Affective Engagement
  - Teacher-student relationships (TSR)
  - Peer support at school (PSS)
  - Family support for learning (FSL)

SEI-Elementary (3<sup>rd</sup>-5<sup>th</sup>)

- Affective
   Engagement
  - Teacher-student relationships (TSR)
  - Peer support for learning (PSL)
  - Family support for learning (FSL)





# **SEI Cognitive Engagement Measures**

SEI (6<sup>th</sup>-12<sup>th</sup>)

- Cognitive Engagement
  - Control and Relevance of School Work (CRSW)
  - Future Aspirations and Goals (FGA)
  - Intrinsic Motivation (IM)

SEI-Elementary (3<sup>rd</sup>-5<sup>th</sup>)

- Cognitive Engagement
  - Future Goals and Aspirations (FGA)



## **SEI Administration**

- Standardized administration
  - Script provided
  - Individual items are read to student(s)
- Can be administered paper/pencil or in an online survey format
  - Online application in development



# **SEI Administration**

## **Student Engagement Instrument**

#### MARKING INSTRUCTIONS

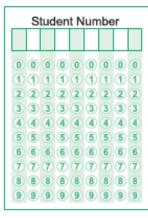
- Use a No. 2 pencil or a blue or black ink pen only.
- Do not use pens with ink that soaks through the paper.
  - ine timeagn the paper
- · Make solid marks that fill the response completely.
- · Make no stray marks on this form.

	TOODON Die Of	agree 1	SHORDA	80a
My family/guardian(s) are there for me when I need them.	% ①	<b>©</b>	<b>3</b>	<sup>3</sup> %
After finishing my schoolwork I check it over to see if it's correct.	1	2	3	4
3. My teachers are there for me when I need them.	1	2	3	4
4. Other students here like me the way I am.	1	2	3	4
5. Adults at my school listen to the students.	1	2	3	4
6. Other students at school care about me.	1	2	3	4
7. Students at my school are there for me when I need them.	1	2	3	4
8. My education will create many future opportunities for me.	1	2	3	4





# **SEI Administration**



#### Elementary Student Engagement Instrument

Your honest answers to this questionnaire will be important for understanding what you think of your school and how to keep improving it. Your answers will be confidential - that means nobody at your school will see what you put for any of the below items. School staff will only see information for groups of items or students.

Please use a pencil. Write your "Student Number" in the "Student Number" boxes provided on this form, and then darken the circles corresponding to each digit of your Student Number.

Do not begin marking your answers until your teacher starts reading the items aloud.

	STRONGLY AGREE	AGREE	IN THE	DISAGREE	STRONGLY DISAGREE
<ol> <li>My family/guardian(s) are there for me when I need them.</li> </ol>	(5)	4	3	2	1
2. If I don't do well in school it's because I'm not smart.	(5)	4	3	2	1
3. My teachers are there for me when I need them.	(5)	4	3	2	1
4. Other students here like me the way I am.	5	4	3	2	1
5. Adults at my school listen to the students.	(5)	4	3	2	1
6. Other students care about me.	(5)	4	3	2	1
7. Students at my school are there for me when I need them.	(5)	4	3	2	1
8. My education will create many chances for me to reach my future goals.	(5)	4	3	2	1



# Individual Items on the SEI

- Student Engagement Instrument (SEI)
- Elementary Student Engagement Instrument (SEI-E)







# SEI Scoring (6th-12th)

#### **Scoring Procedures**

Within each clear box, write the number that corresponds with the rating identified by the student. Use either five or four options depending on the version of the SEI Scale you are using.

5-point scale: Strongly Disagree (1), Disagree (2), Neither Agree Nor Disagree (3), Agree (4), Strongly Agree (5) 4-point scale: Strongly Disagree (1), Disagree (2), Agree (3), Strongly Agree (4)

Item	TSR	PSS	FSL	CRSW	FG	IM*
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						
33						
34						
35						
Total						
		Affective			Cognitive	

Student response coded as follows to value in the clear	efor	
	DOX.	
5-point scale: Strongly Agree	(5)	= 1
Agree		= 2
Disagree	(2)	
Strongly Disagree		= 5
4-point scale:		
Strongly Agree	(4)	= 1
Agree	(3)	
Disagree	(2)	= 3
Strongly Disagree	(1)	= 4

Write each column total in the box next to the column Then divide by the number of items answered to ca		lumn average.
AFFECTIVE (PSYCHOLOGICAL) ENGAGEMENT:		
Teacher-Student Relationships (TSR)	$\Box$ /	9 (or 8 or 7 if fewer answered)
Peer Support at School (PSS)	$\Box$ /	6 (or 5 if fewer answered)
Family Support for Learning (FSL)	$\Box$ /	4 (or 3 if fewer answered)
COGNITIVE ENGAGEMENT:		
Control and Relevance of School Work (CRSW)	$\Box$ /	9 (or 8 or 7 if fewer answered)
Future Aspirations and Goals (FG)	$\Box$ /	5 (or 4 if fewer answered)
Intrinsic Motivation (IM)		2
SEI Total (SEI_Tot)	$\Box$ /	35 (use number answered)

# SEI Scoring (3<sup>rd</sup> - 5<sup>th</sup>)

#### Scoring Procedures

Within each clear box, write the number that corresponds with the rating identified by the student. 5-point scale: Strongly Disagree (1), Disagree (2), In the middle (3), Agree (4), Strongly Agree (5)

Item	TSR	PSL	FSL	FGA	IM*	BEH	DISS	Notes
1								*Intrinsic motivation (IM) items #17 and #30 need to be
2								reversed in value.
3								
5								Student responses for items
6								17 and 30, should be recoded as follows before entering
7		_						the value in the clear box:
8								Strongly agree (5) = 1
9								Agree $(4) = 2$
10								In the middle (3) = 3 Disagree (2) = 4
11								Strongly disagree (1) = 5
12								
13								Affective Engagement:
14								TSR = teacher student relationship:
15								PSL = peer support for learning;
16								FSL = Family support for
17								learning;
18								Cognitive Engagement:
19								FGA = Future aspiration and
20								goals; IM = intrinsic motivation
21								
22								Additional domains:
23								BEH= Behavioral
24								Engagement
25								DISS= Disaffection
26								
27								
28								
29								
30								
31a								
31b								
31c								
Domain	TSR	PSL	FSL	FGA	IM	BEH	DISS	
Total								

Write each column total in the box next to the column title, then divide by the number of items answered2 to calculate a column average.

AFFECTIVE (PSYCHOLOGICAL) I	ENGAGEMENT
Teacher-Student Relationship (TSR)	9 (or 8 or 7 if fewer answered)
Peer Support for Learning (PSL)	6 (or 5 if fewer answered)
Family Support for Learning (FSL)	6 (or 5 if fewer answered) 3 (or 2 if fewer answered)
COGNITIVE ENGAGEMENT:	
Future Goals and Aspirations (FGA)	5 (or 4 if fewer answered)
Intrinsic Motivation (IM)	2 (or 1 if fewer answered)
SEI TOTAL	26 (use number answered)
	(use number answered)



# **SEI Results and Interpretation**

- School/district-wide administration/interpretation
  - Develop local norms
  - Obtain percentile rank based on local norms
  - Identify lowest 10% of students
- Individual student administration/interpretation
  - Percentile rank for total scores and individual domains
  - Track changes in percentile rank from fall to







# **Understanding SEI Scores**

- Scores at or below the 10% percentile are most significant indicators of low student engagement
- General groupings
  - Low engagement: 1<sup>st</sup> percentile- 25<sup>th</sup> percentile
  - Middle/average engagement: 25<sup>th</sup> percentile 75<sup>th</sup> percentile
  - High engagement: 75<sup>th</sup> percentile 99<sup>th</sup> percentile



# **Understanding SEI Scores**

- Use SEI subscale percentile ranks to inform interventions with students:
  - Affective Engagement
    - Teacher-Student Relationships: 32
    - Peer Support at School: 13
    - Family Support for Learning: 55
  - Cognitive Engagement
    - Control-Relevance of School Work: 19
    - Future Goals and Aspirations: 57
    - Intrinsic Motivation: 92
- Also use information about:
  - Academic achievement
  - Discipline
  - Attendance
  - Personal observation





# **Increasing Student Engagement**

- Review student engagement handout
- What would you do as a Check & Connect mentor?

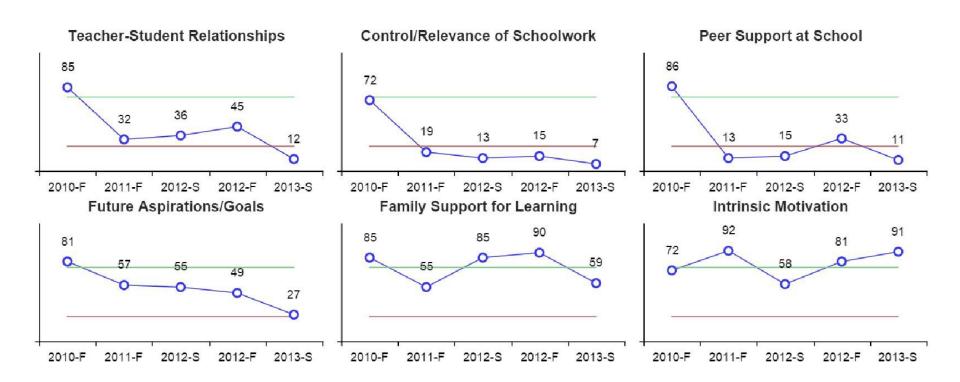






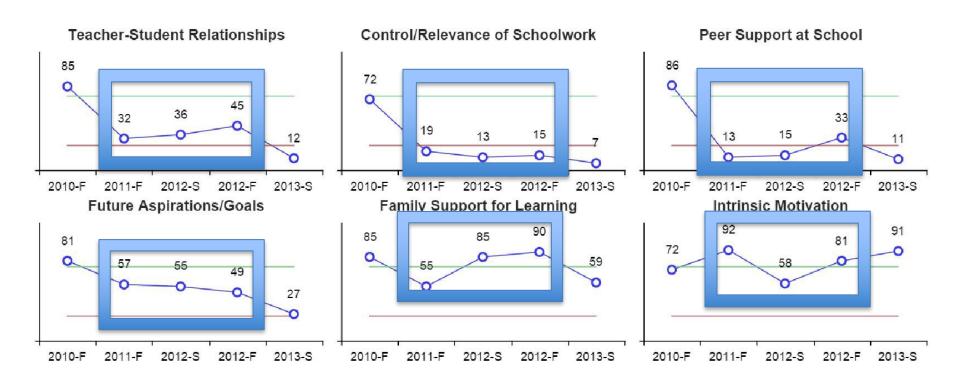


## **Percentile Ranks Over Time**





# Percentile Ranks Over Time (Fall 2011-Fall 2012)





# **Understanding Changes in SEI Scores**

- Affective Engagement
  - Teacher-Student Relationships: 32-36-45
  - Peer Support at School: 13-15-33
  - Family Support for Learning: 55-85-90
- Cognitive Engagement
  - Control-Relevance of School Work: 19-13-15
  - Future Goals and Aspirations: 57-55-49
  - Intrinsic Motivation: 92-58-81





# **Next Steps**

- Read more about the SEI:
   <u>http://checkandconnect.umn.edu/research/engagement.html</u>
- Register to gain access to the SEI and supporting documents: <a href="http://checkandconnect.umn.edu/research/sei-register.html">http://checkandconnect.umn.edu/research/sei-register.html</a>
- Stay tuned for the launch of the SEI App!

