

<b>Name of Instrument</b>	<b>Reading Engagement Index (REI)</b>
<b>Developer/ Website</b>	The items were developed by Dr. Allan Wigfield and Dr. John Guthrie at the University of Maryland.
<b>Instrument Availability/ Key Source(s)</b>	The items are described in the following published article in which the authors indicate that the items and format for the instrument are available by contacting them.  Wigfield, A., Guthrie, J.T., Perencevich, K. C., Taboada, A., Klauda, S.L., McRae, A., & Barbosa, P. (2008). Role of reading engagement in mediating the effects of reading comprehension instruction on reading outcomes. <i>Psychology in the Schools, 45</i> , 432-445.
<b>Population</b>	Wigfield and Guthrie have used the REI on a sample of 492 4 <sup>th</sup> grade students in a small mid-Atlantic city and a sample of 31 4 <sup>th</sup> grade students in two mid-Atlantic state schools. The student samples were roughly 60%-70% European American, 20%-28% African American, and 5%-7% Hispanic.
<b>Type of Method</b>	Teacher rating of each student's reading engagement
<b>Overview</b>	The Reading Engagement Index is a teacher rating of the extent to which each student is an engaged reader in their classroom. It was developed originally as an outcome measure for examining the effectiveness of a professional development intervention, Concept-Oriented Reading Instruction (CORI) designed by John Guthrie and colleagues to enhance students' reading engagement and increase reading comprehension (Guthrie, McRae, & Klauda, 2007). The term "engagement" as the goal of the intervention was defined as consistent with a multi-dimensional approach in that it includes behavioral, emotional/motivational, and cognitive aspects. Thus, the engaged reader is assumed to be behaviorally active (reading frequently), internally motivated (liking to read), and cognitively active (uses strategies in reading). CORI teaches five instructional practices in reading that are "engagement supporting" to science or other content teachers ( <a href="http://www.cori.umd.edu/what-is-cori/">www.cori.umd.edu/what-is-cori/</a> ) and is primarily focused on upper elementary levels (grades 3-5). Guthrie, McRae, & Klauda (2007) report on 11 studies of the impact of CORI. In addition to reading comprehension scores, studies have examined CORI impact on other measures including reading engagement of students as rated by teachers (REI).
<b>Administration</b>	The REI is a set of items each teacher completes on each student in their class. Wigfield et al. (2008) reported that teachers rated all students in their classroom in a 20 minute session.
<b>Domains Measured</b>	The REI contains eight items intended to reflect the behavioral, motivational, and cognitive characteristics of engaged reading. The REI items on which teachers rate individual students in their class are: <ol style="list-style-type: none"> <li>1. This student often reads independently.</li> <li>2. This student reads favorite topics and authors.</li> <li>3. This student is easily distracted in self-selected reading.* (reverse scored)</li> <li>4. This student works hard in reading.*</li> <li>5. This student is a confident reader.*</li> <li>6. This student uses comprehension strategies well.*</li> <li>7. This student thinks deeply about the content of texts.</li> <li>8. This student enjoys discussing books with peers.</li> </ol>

	*The authors have also used a shortened version of the instrument including the four items that were most correlated with students' self-reported motivation for reading as measured by the Wigfield and Guthrie (1997) Motivation for Reading Questionnaire (MRQ). These items are indicated above with an asterisk.
<b>Scoring/ Reporting</b>	The response format for the above items is 1 = not true to 4 = very true. The teacher's rating of each student's reading engagement on the items results in a total score of 8 to 32. If the shortened four item set is used, scores would range from 4 to 16.
<b>Reliability</b>	Wigfield et al. (2008) reported the internal consistency reliability on a sample of 4 <sup>th</sup> graders as .92. Using the four item version of the scale, the alpha was .89. Guthrie, McRae, & Klauda (2007) reported reliabilities for a seven-item REI used in two prior studies of CORI impact as exceeding .93.
<b>Validity</b>	Wigfield et al. (2008) reported that factor analysis indicated construct validity evidence supporting one factor. The measure, at the individual student level, was positively correlated with achievement as measured by both the Gates-MacGinitie and a text comprehension measure, thus, showing criterion-related validity. Guthrie et al. (2007) showed that teacher ratings of individual student reading engagement (on the REI) and the student self-reports of motivation in reading (on the MRQ) were moderately correlated, as was the case with the shortened four-item version of the REI and the Motivation for Reading Questionnaire (MRQ) in the Wigfield et al. (2008) study, showing additional evidence for construct validity.
<b>Overview of Use</b>	The use of REI has been in published research by the instrument developers exploring the nature of reading engagement and motivation and the impact of the CORI intervention on reading engagement.

## References

- Guthrie, J.T., McRae, A. & Klauda, S.L. (2007). Contributions of Concept-Oriented Reading Instruction to knowledge about interventions for motivations in reading. *Educational Psychologist, 42*, 237-250.
- Guthrie, J.T., Hoa, L.W., Wigfield, A., Tonks, S.M., Humenick, N. & Littles, E. (2007). Reading motivation and reading comprehension growth in the later elementary years. *Contemporary Educational Psychology, 32*, 282-313.
- Wigfield, A. & Guthrie, J.T. (1997). Relations of children's motivation for reading to the amount and breadth of their reading. *Journal of Educational Psychology, 89*, 420-432.
- Wigfield, A., Guthrie, J.T., Perencevich, K. C., Taboada, A., Klauda, S.L., McRae, A., & Barbosa, P. (2008). Role of reading engagement in mediating the effects of reading comprehension instruction on reading outcomes. *Psychology in the Schools, 45*, 432-445.

# Reading Engagement Index (REI)

Teacher: \_\_\_\_\_ Date: \_\_\_\_\_

**Directions: This is a questionnaire on students' engagement in reading throughout the day in your classroom. Write each student's name on the spaces provided and fill out the column under each.**

This Student:	Student 1:			Student 2:			Student 3:		
	NOT TRUE	VERY TRUE	NA	NOT TRUE	VERY TRUE	NA	NOT TRUE	VERY TRUE	NA
1. Often reads independently.	1 2 3 4 5	1	1 2 3 4 5	1	1 2 3 4 5	1	1 2 3 4 5	1	
2. Reads favorite topics and authors.	1 2 3 4 5	1	1 2 3 4 5	1	1 2 3 4 5	1	1 2 3 4 5	1	
3. Easily distracted in self-selected reading.	1 2 3 4 5	1	1 2 3 4 5	1	1 2 3 4 5	1	1 2 3 4 5	1	
4. Works hard in reading.	1 2 3 4 5	1	1 2 3 4 5	1	1 2 3 4 5	1	1 2 3 4 5	1	
5. Is a confident reader.	1 2 3 4 5	1	1 2 3 4 5	1	1 2 3 4 5	1	1 2 3 4 5	1	
6. Uses comprehension strategies well.	1 2 3 4 5	1	1 2 3 4 5	1	1 2 3 4 5	1	1 2 3 4 5	1	
7. Thinks deeply about the content of texts.	1 2 3 4 5	1	1 2 3 4 5	1	1 2 3 4 5	1	1 2 3 4 5	1	
8. Enjoys discussing books with peers.	1 2 3 4 5	1	1 2 3 4 5	1	1 2 3 4 5	1	1 2 3 4 5	1	

This Student:	Student 4:			Student 5:			Student 6:		
	NOT TRUE	VERY TRUE	NA	NOT TRUE	VERY TRUE	NA	NOT TRUE	VERY TRUE	NA
1. Often reads independently.	1 2 3 4 5	1	1 2 3 4 5	1	1 2 3 4 5	1	1 2 3 4 5	1	
2. Reads favorite topics and authors.	1 2 3 4 5	1	1 2 3 4 5	1	1 2 3 4 5	1	1 2 3 4 5	1	
3. Easily distracted in self-selected reading.	1 2 3 4 5	1	1 2 3 4 5	1	1 2 3 4 5	1	1 2 3 4 5	1	
4. Works hard in reading.	1 2 3 4 5	1	1 2 3 4 5	1	1 2 3 4 5	1	1 2 3 4 5	1	
5. Is a confident reader.	1 2 3 4 5	1	1 2 3 4 5	1	1 2 3 4 5	1	1 2 3 4 5	1	
6. Uses comprehension strategies well.	1 2 3 4 5	1	1 2 3 4 5	1	1 2 3 4 5	1	1 2 3 4 5	1	
7. Thinks deeply about the content of texts.	1 2 3 4 5	1	1 2 3 4 5	1	1 2 3 4 5	1	1 2 3 4 5	1	
8. Enjoys discussing books with peers.	1 2 3 4 5	1	1 2 3 4 5	1	1 2 3 4 5	1	1 2 3 4 5	1	

# Reading Engagement Index

John T. Guthrie and Marcia H. Davis  
University of Maryland  
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## Participants:

We tested the Index of Engagement in Reading with 19 teachers and 405 fourth-grade students. These students were administered the Gates-MacGinitie. The results of the Gates-MacGinitie Grade Equivalence scores for these students are below:

Range: 1.4 – 12.0

Mean: 5.21

Standard Deviation: 2.71

## Calculation of the Score:

The Index of Engagement has a total of eight items. Each item has a scale from one to five. On the index is also a space for teachers to code “not applicable.” The total score is calculated by summing all eight items with item three reversed coded.

## Descriptive Statistics:

Range: 8 - 40

Mean: 28.28

Standard Deviation: 8.52

## Reliability Analysis:

The reliability of scores on the Index of Engagement was calculated. Item three was reversed coded in this analysis.

### RELIABILITY ANALYSIS - SCALE (ALPHA)

#### Item-total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Alpha if Item Deleted
I1	24.6247	54.8984	.8596	.9305
I2	24.7136	56.3336	.7586	.9376
I3R	25.1605	56.2786	.6760	.9446
I4	24.4765	57.1808	.8276	.9334
I5	24.6173	56.0339	.8343	.9325
I6	24.7432	56.0478	.8263	.9330
I7	25.0321	54.6500	.8503	.9311
I8	24.6198	57.0085	.7478	.9382

#### Reliability Coefficients

N of Cases = 405.0

N of Items = 8

Alpha = .9428

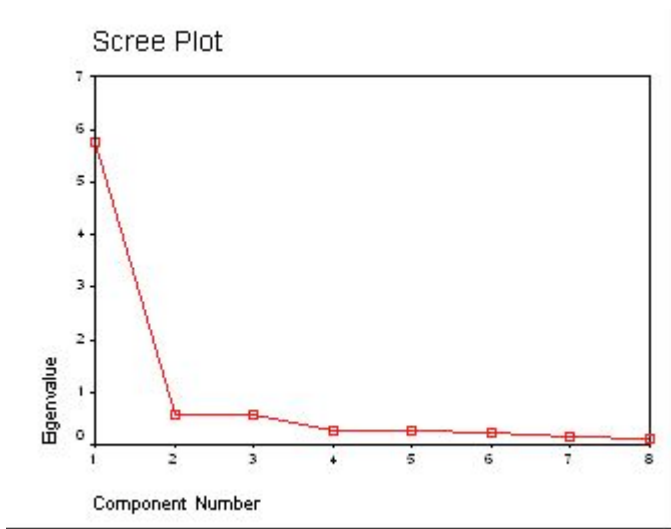
**Factor Analysis:**

A factor analysis on the scores on the Index of Engagement was calculated. Item three was reversed coded in this analysis.

**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.775	72.186	72.186	5.775	72.186	72.186
2	.603	7.532	79.718			
3	.564	7.046	86.764			
4	.284	3.554	90.317			
5	.272	3.398	93.715			
6	.228	2.853	96.568			
7	.146	1.824	98.392			
8	.129	1.608	100.000			

Extraction Method: Principal Component Analysis.



**Component Matrix(a)**

	Component 1
I1	.895
I7	.893
I5	.881
I6	.874
I4	.871
I2	.816
I8	.811
I3R	.745

Extraction Method: Principal Component Analysis.  
a. 1 components extracted.