



FAQs on IRIs

Robert D. Carpenter
University of Michigan

Thank You!

■ **CIERA Researchers**

- ◆ Scott Paris
- ◆ P. David Pearson
- ◆ Alison Paris
- ◆ Denise Larabell
- ◆ Amy Smith
- ◆ Gina Cervetti
- ◆ Sharman Siebenthal
- ◆ Brigette Laier

■ **Teachers and Administrators in:**

- ◆ Ann Arbor Public Schools
- ◆ Milan Area Schools
- ◆ Monroe Public Schools
- ◆ Willow Run Public Schools



General questions addressed

- Why should I use an IRI?
- Which IRI do I use?
- When should I administer an IRI?
- How do I administer an IRI?
- What can I do with the data?
- What are some limitations of using an IRI?

Why should I use an IRI?

- Authentic text
- Individualized assessment on:
 - ◆ Oral reading accuracy/student miscues
 - ◆ Story recall
 - ◆ Comprehension
- Results informative for instructional decisions
- Can be used as a diagnostic and summative assessment tool
- Blur the distinction between assessment and instruction

Which IRI do I use?

- Analytic Reading Inventory (ARI)
- Basic Reading Inventory (BRI)
- Burns/Roe Informal Reading Inventory (BRIRI)
- Developmental Reading Assessment (DRA)
- Ekwall/Shanker Reading Inventory (ESRI)
- Qualitative Reading Inventory (QRI)

When should I administer an IRI?

- Before school year
- Before school day
- After school day
- Teach release time
- Instructional assistants
- During instruction



How do I administer an IRI?

- How do I select a level to administer?
- What should I score?
- When should I stop testing?
- When should I record the information?
- How should I record the information?

How do I select passage level?

- Use word lists to identify an instructional level
- Use previous IRI performance as an indicator
- Use other classroom information to select an instructional level of reading



What should I score?

- Miscues
- Reading time
- Prosody
- Retelling
- Comprehension questions

When should I stop testing?

- When a child reaches a frustration level
 - ◆ Oral reading accuracy
 - ◆ Comprehension
 - ◆ Combination of accuracy and comprehension



When should I record information?

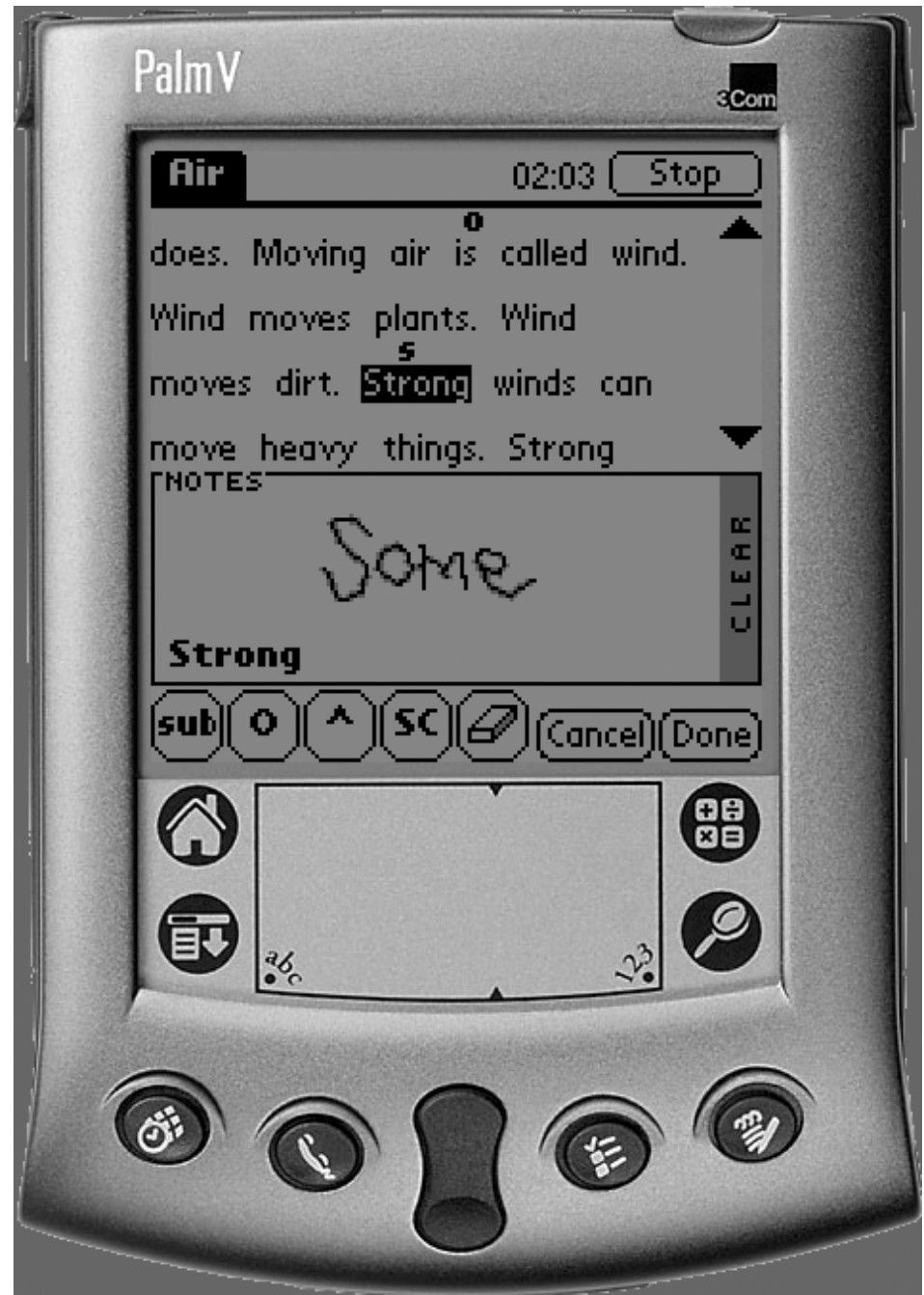
- ◆ During the administration
- ◆ After the session by recording the reading



How should I record information?

- ◆ Paper
- ◆ Palm Pilot

Palm Pilot





What can I do with the data?

- What data do I have?
- How do I score the data?
- How can I use the data?
- How reliable is the data?



What data do I have?

- Miscues
- Reading time
- Prosody
- Propositions
- Comprehension questions

How do I score the data?

■ Miscues

- ◆ Total number of miscues
- ◆ Number of meaning changing miscues
- ◆ Percent accurate
- ◆ Words correct per minute

■ Prosody

- ◆ Rubric

Scoring Data, cont.

■ Propositions

- ◆ Total number recalled
- ◆ Percent recalled
- ◆ Number of key elements recalled
- ◆ Percent key elements recalled
- ◆ Rubric

■ Comprehension questions

- ◆ Total number correct
- ◆ Percent questions correct
- ◆ Type of questions correct



How can I use the data?

- Make instructional decisions
 - ◆ Whole group for common issues
 - ◆ Mini lessons
 - ◆ Individualize instruction
- Professional development
 - ◆ Learning about reading development
 - ◆ Creating a community of teacher-researchers

Data use, cont.

- Summative measure of student progress
 - ◆ Administer same passage
 - ◆ Administer different passage but same level
 - ◆ Highest instructional level
 - ◆ IRT scaling



Data use, cont.

- Administrative Reports
 - ◆ Create student reports for teachers and parents

Student Report

Fall Student Report

Name: Student 1
 Grade: 2
 Teacher: Teacher 1

Test: Qualitative Reading Inventory
 Date of Reading Assessment: Aug/Sept, 2001

Oral Reading Measures for Informational Text

		First Passage	Second Passage	Third Passage
Comprehension	Grade Level Passage Read	1	2	
	Oral Reading Comprehension	83%	38%	
	Oral Reading Retelling	10%	5%	
Fluency	Oral Reading Accuracy	97%	95%	
	Oral Reading Rate	93 Words/Minute	88 Words/Minute	

Word Recognition Score: 129 Words

Scoring Key

Oral Reading Progress Profile

	Frustration Below Average	Instructional Average	Independent Above Average
Comprehension	Below 50%	50-74%	75-100%
Retelling	Below 10%	10-25%	25-100%
Accuracy	Below 90%	90-94%	95-100%
Rate	Below 60 WPM	60-98 WPM	Above 98 WPM

Word Recognition Score

	Below Average	Average	Above Average
First Grade	0-39	40-60	Above 60
Second Grade	0-59	60-80	Above 80
Third Grade	0-79	80-100	Above 100
Fourth Grade	0-99	100-120	Above 120



Data use, cont.

- Administrative Reports
 - ◆ Create student reports for teachers and parents
 - ◆ Create classroom reports for teachers and principals

Classroom report

QRI Summary Information

Last Name	First Name	ID Number	Fall WL	Spring WL	Fall QRI	Spring QRI	Fall WPM	Spring WPM	Fall Fluent	Spring Fluent	Fall %Acc	Spring %Acc	Fall %Prop	Spring %Prop	Fall %Comp	Spring %Comp
			88	105	3	3	64.71	75.29	2	2	94.64	98.47	8.51	23.40	62.50	37.50
			131	147	5	5	72.23	65.13	2	4	96.06	98.43	31.48	25.93	62.50	75.00
				33		PP		8.91		1		89.80		23.53		50.00
			92	147	3	3	61.17	93.21	2	3	98.08	100.00	29.79	53.19	37.50	87.50
			124	157	4	4	103.44	81.84	3	4	94.66	97.86	6.12	24.49	75.00	87.50
			98	136	4	4	98.02	80.29	2	3	94.31	97.51	14.29	16.33	87.50	75.00
			150	159	6	6	69.27	61.95	3	4	98.43	98.82	17.31	34.62	75.00	50.00
			140	152	4	4	77.95	95.41	2	3	96.91	98.63	8.16	28.57	50.00	75.00
			112	151	4	4	71.44	67.17	3	4	95.73	98.22	4.08	18.37	37.50	75.00
			108	148	3	3	103.03	108.00	2	3	98.47	98.85	25.53	38.30	75.00	100.00
				65		1		16.19		1		89.13		15.00		83.33
				102		2		80.41		2	0.00	91.88	0.00	36.73		50.00
			73	101	1	1	84.92	134.63	2	3	97.83	100.00	25.00	35.00	50.00	83.33
			119	152	4	4	67.98	101.57	1	3	98.58	98.58	40.82	36.73	75.00	75.00
			89	119	1	1	60.66	75.62	3	3	97.83	100.00	20.00	20.00	50.00	50.00
			71	104	1	1	110.40	134.63	3	3	100.00	98.91	50.00	30.00	16.67	66.67
			137	154	4	4	117.90	133.81	4	3	97.51	98.93	22.45	20.41	62.50	62.50
			68	104	P	P	43.26	93.00	2	3	91.94	100.00	44.44	44.44	50.00	100.00
			110	150	2	2	87.56	125.74	3	4	96.95	97.97	38.78	46.94	25.00	75.00
			155	156	3	3	105.10	118.64	3	3	98.47	98.85	17.02	25.53	62.50	75.00
			86	143	2	2	60.93	91.63	2	3	99.49	99.49	28.57	38.78	50.00	62.50
			93	125	2	2	67.93	71.20	2	2	97.97	99.49	30.61	16.33	87.50	75.00
			108	154	2	2	83.24	111.51	2	3	98.98	97.46	22.45	26.53	37.50	62.50

Data use, cont.

- How can I use the data?
 - ◆ Administrative Reports
 - ◆ Create student reports for teachers and parents
 - ◆ Create classroom reports for teachers and principals
 - ◆ Create building reports for principals

Building Report

Grade	Teacher	Word List		Accuracy		Comprehension		WPM		Propositions	
		Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring
Second	Overall Average	65.45	101.55	47.86	58.84	46.86	56.31	48.83	59.39	47.47	57.18
	Teacher 1	61.35	110.60	52.78	64.10	47.99	63.12	50.75	66.09	47.17	57.66
	Teacher 2	56.06	87.48	49.51	56.25	46.95	56.43	49.71	54.52	44.00	54.91
	Teacher 3	55.18	85.74	47.70	55.77	47.76	53.92	49.32	57.88	51.61	59.81
	Teacher 4	73.00	103.13	48.78	58.47	48.08	55.66	46.28	60.84	46.09	54.98
	Teacher 5	60.12	94.48	52.52	58.62	47.29	55.72	48.63	57.52	49.98	57.31
	Teacher 6	55.29	105.00	36.95	59.86	37.44	51.19	46.36	57.57	41.82	57.39
Third	Overall Average	105.46	131.06	51.25	55.46	51.13	56.60	51.20	56.14	52.49	58.82
	Teacher 1	96.55	119.26	55.31	58.17	49.20	55.21	51.78	59.48	54.13	52.81
	Teacher 2	107.43	133.92	54.19	55.42	49.52	55.75	51.71	59.95	54.91	66.63
	Teacher 3	106.04	131.63	50.70	54.57	53.18	54.31	59.08	64.10	53.70	55.92
	Teacher 4	97.21	127.13	46.63	56.76	46.88	58.28	46.29	52.77	48.75	60.91
	Teacher 5	109.09	126.92	52.57	53.77	52.87	58.83	47.25	52.43	54.03	59.52
	Teacher 6	108.09	137.87	48.55	54.88	52.77	56.54	47.92	42.44	53.81	56.65
Fourth	Overall Average	130.47	146.20	50.29	53.55	51.11	57.73	49.61	55.87	49.47	56.08
	Teacher 1	135.61	145.56	50.89	53.97	55.51	61.27	47.79	56.08	54.67	62.57
	Teacher 2	140.58	157.08	55.27	54.26	55.05	59.45	51.80	57.72	45.36	55.91
	Teacher 3	144.58	161.27	52.94	55.38	55.40	59.66	54.76	63.88	56.87	52.80
	Teacher 4	125.50	139.78	43.67	52.96	50.19	55.52	46.79	54.81	49.74	56.11
	Teacher 5	115.39	135.81	53.02	51.55	48.17	61.38	44.85	49.25	43.93	57.76
	Teacher 6	125.67	136.40	50.77	55.31	47.60	56.25	49.17	54.01	48.99	52.43
	Teacher 7	121.13	141.46	49.88	52.53	44.75	50.88	51.90	54.42	46.58	53.56

What can I do with the data?

- How can I use the data?
 - ◆ Administrative Reports
 - ◆ Create student reports for teachers and parents
 - ◆ Create classroom reports for teachers and principals
 - ◆ Create building reports for principals
 - ◆ Create district reports

District Report

QRI District Report for Fall 2001

Date:

		Fall			Spring			% Students Up 1 or more Passage Levels
		% above Grade Level	% at Grade Level	% below Grade Level	% above Grade Level	% at Grade Level	% below Grade Level	
Grade	1							
	2	24.7	13.5	61.9				
	3	27.5	35.8	36.8				
	4	33.8	26.2	40.1				
	5	31.9	19.9	48.2				
Overall		29.0	22.7	48.2				

Key:

1. Columns include the percentage of students whose highest instructional level passage is above, at, or below grade level on QRI testing in the fall or spring. Grade level passages were the QRI levels for all grades (e.g. QRI level 2 is considered the second grade passage) except first grade, where both the level 1 and primer passages were considered at grade level.
2. Percent of students showing improvement is the percentage of students who have demonstrated one or more passage level improvement from fall to spring, regardless of whether they are reading above, at, or below grade level.



Data use, cont.

- Communicating with parents

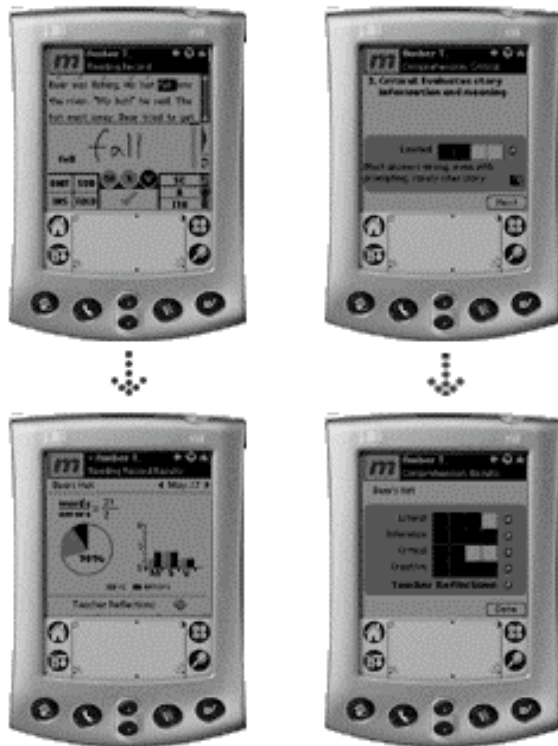
Teacher Responses

- “I used the test result reports at my conferences and I thought they were very helpful. I could show the parents exactly what their child needed and tell them how we were addressing that in the classroom. Thanks for providing them.,, Teacher 1

“I just wanted to give you some feedback on the QRI sheet. I used them for all conferences, and I'm really glad we had them. It said it all. Parents really enjoyed seeing it and really liked the idea that we'd do it again at the end and would get to see the growth... I definitely would like to use them again next year.,, Teacher 2

Palm Pilot www.wgen.net

1 Teachers use handheld computer to assess student reading progress.



3 Teachers press one button to instantly generate...



2 Real-time feedback provides critical performance information to help target reading instruction.

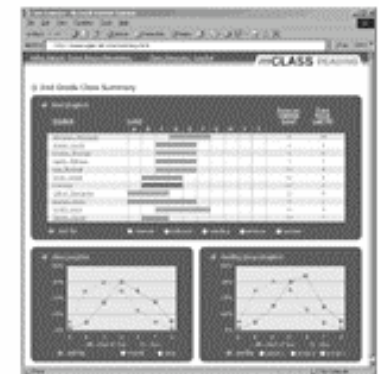
4



Reports to teachers



Reports to parents

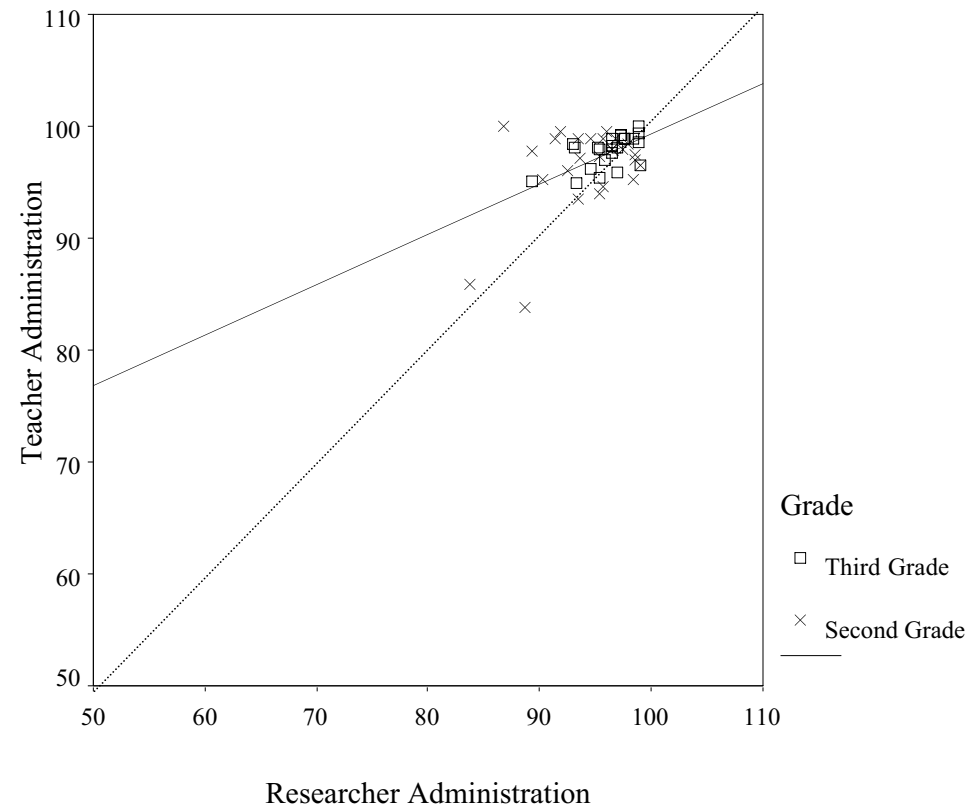


Reports to administrators

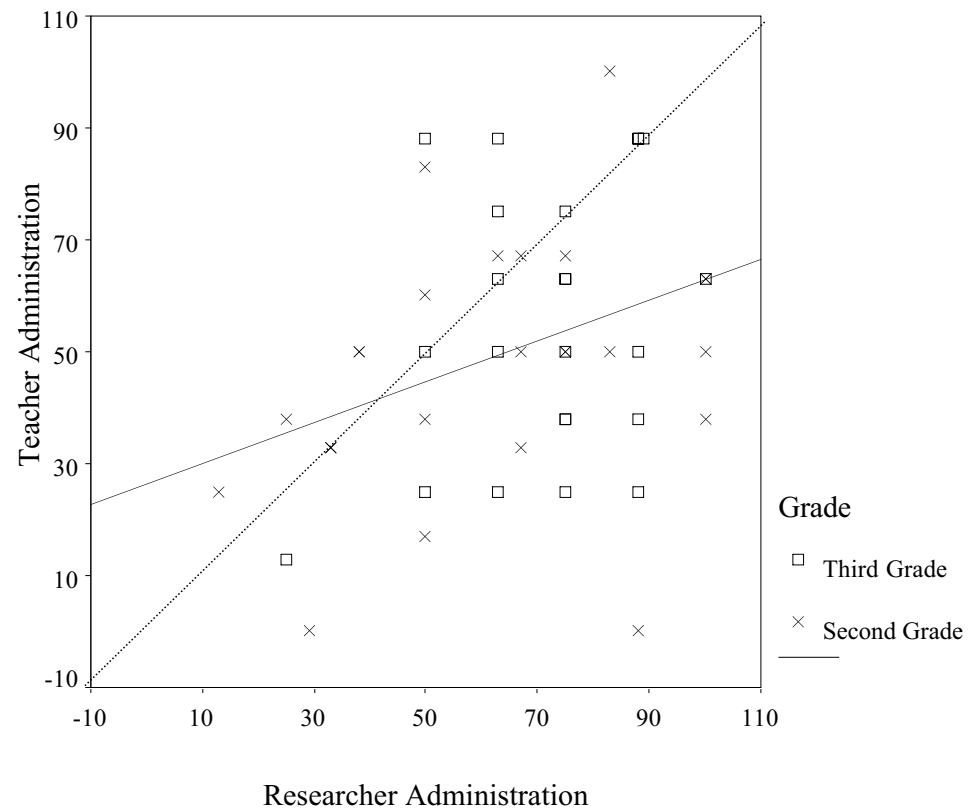
How reliable is the data?

Task	QRI	MLPP/DRA
Word List	.66***	.78***
Word Scale	.94***	.98***
Accuracy	.51***	.46***
Fluency	.54**	
Rate	.78***	
Comprehension	.35*	
Retelling	.53***	.10

QRI Reading Accuracy



QRI Reading Comprehension



Concurrent Validity

IRI	Task	GMRT	ITBS	MEAP	
				Story	Info
BRI	Word List	.90***	.64***	.60***	.64***
	Comprehension	.48**		.36*	
QRI	Comprehension	.71***		.50***	.45***

Consequential Validity

■ Teacher Response:

- ◆ “I think probably the most positive experience with that would be just seeing how useful it is in tailoring my instruction for certain children. I think it shows the growth that they’re making throughout the year and I can share that with parents, with teams of people that are working with these children. But most importantly, it really does help me see what I need to work on with individual students.,,

Consequential Validity

■ Principal Response:

- ◆ “For me, the best was seeing teachers so excited about assessment results. That had never happened before. I mean, they were genuinely excited. Without solicitation, they would come to me and show me the gains kids would make.,,

Consequential Validity

- Central Administrator Response:
 - ◆ “Well, it provides us with information, more information than we ever had before on individual students and abilities, progress. It gives us information so that we can compare how students are doing in reading from year to year, unlike the MEAP.,,

What are some limitations?

■ Text Issues

- ◆ Leveling
- ◆ Topics covered
- ◆ Passage variability

■ Comprehension Issues

- ◆ Recall with length variability
- ◆ Quality of questions

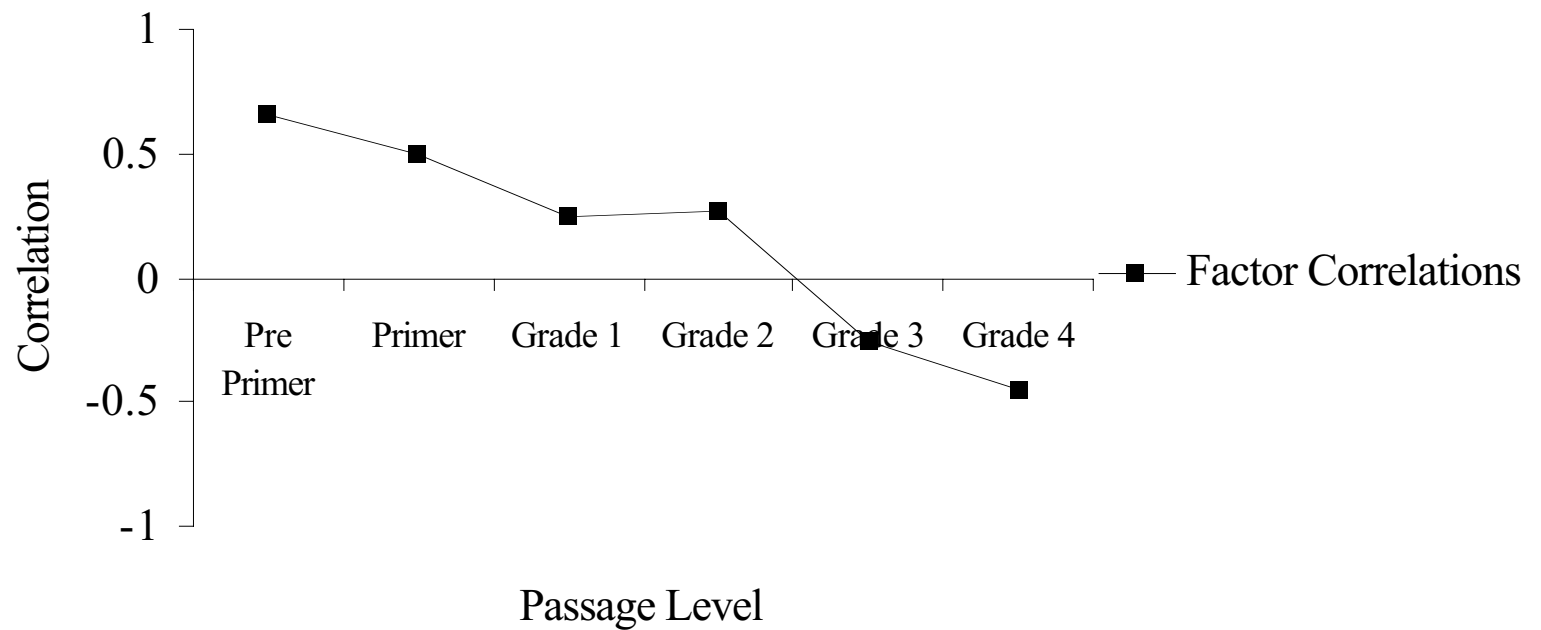


Limitations, cont.

- Administration
 - ◆ Time
 - ◆ Individual administration
- Developmental Issue
 - ◆ Growing disassociation between oral reading and comprehension

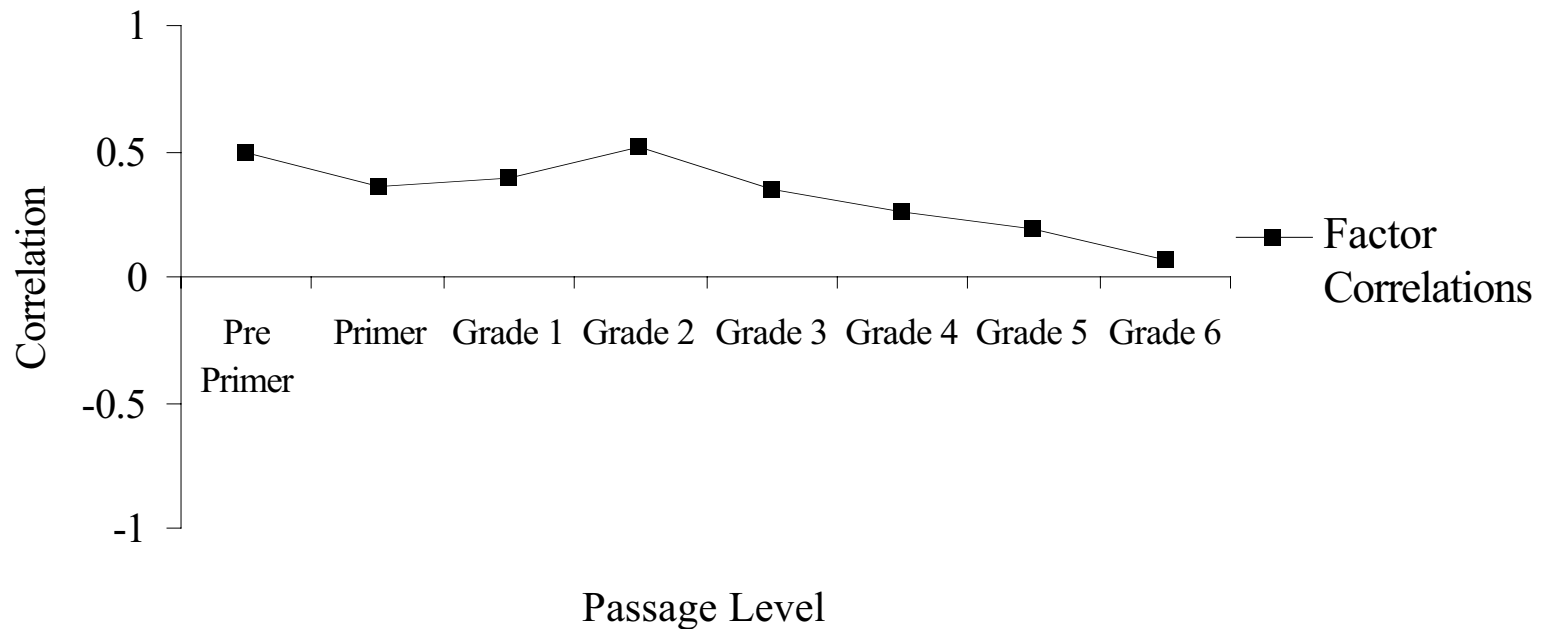
QRI Accuracy and Comprehension

Figure 3. Posttest Correlations Between Oral Reading Factor and Comprehension Factor



BRI Accuracy and Comprehension

Figure 14. Posttest Correlations Between Oral Reading Factor and Comprehension Factor





Conclusions

- Provides multiple indicators of reading proficiency
- Is both diagnostic and summative
- IRIs blur the distinction between assessment and instruction

Contact Information



- www.ciera.org

- e-mail: phaedrus@umich.edu