



Data Literacy: **Setting the** **Foundation**

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Consortium**

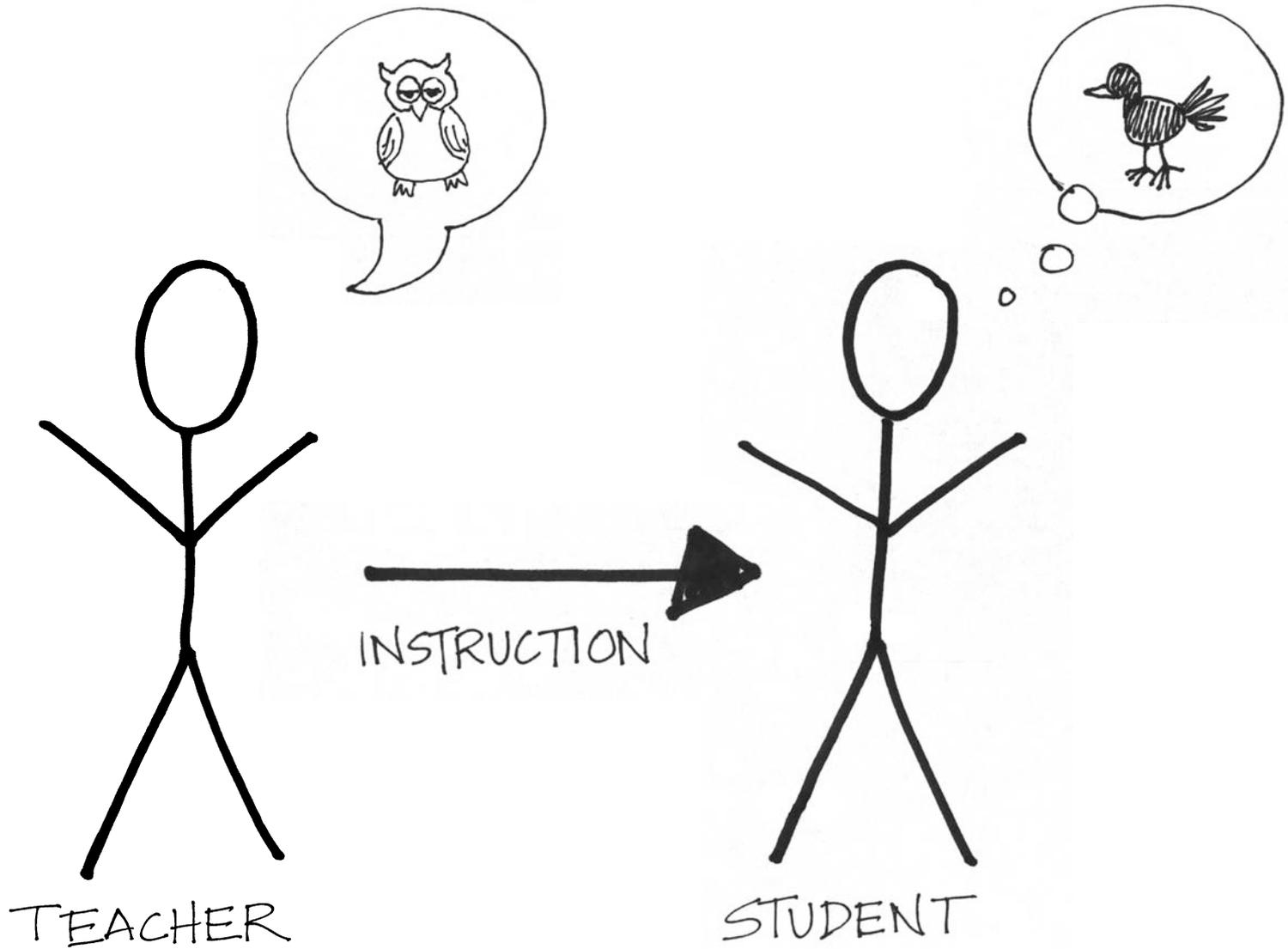
**Francis Marion
March 12, 2013**

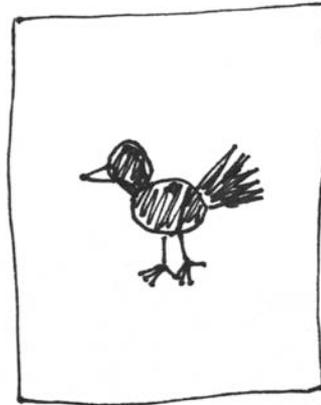
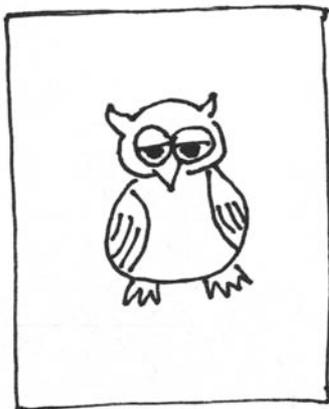
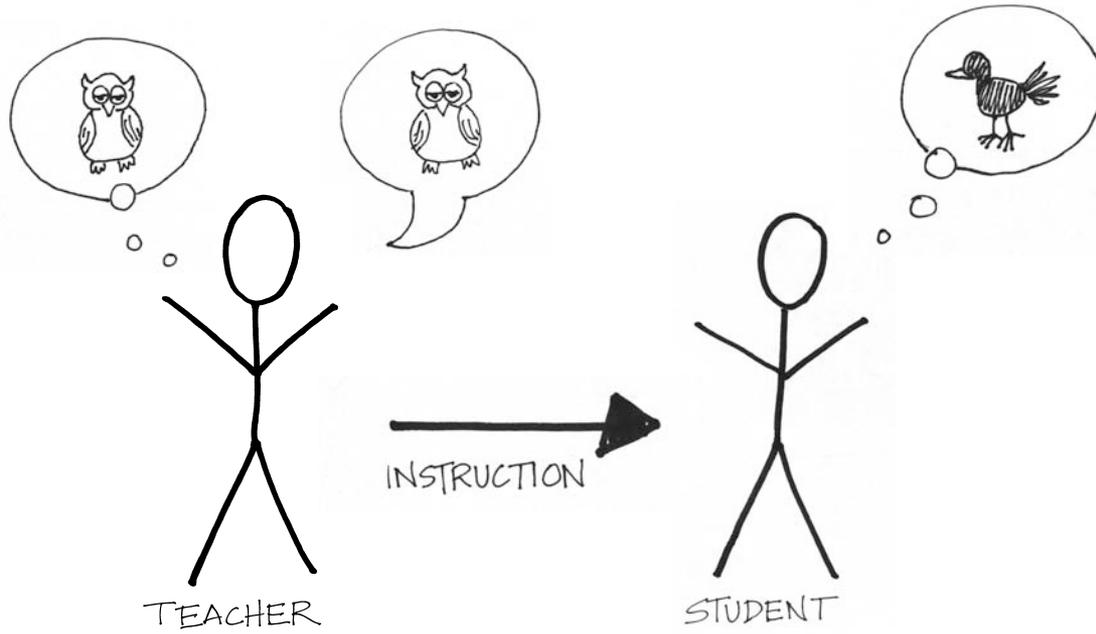
Handouts, links, and
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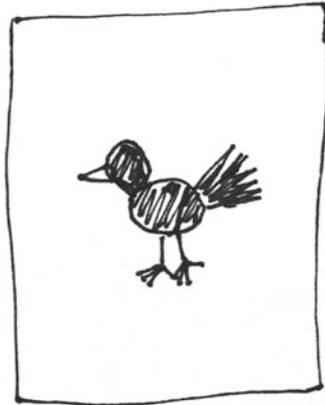
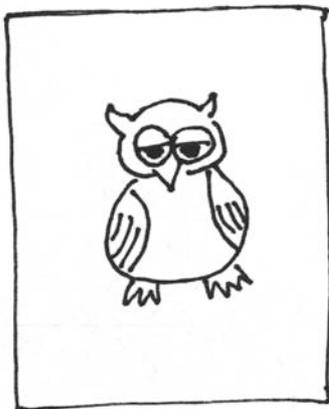
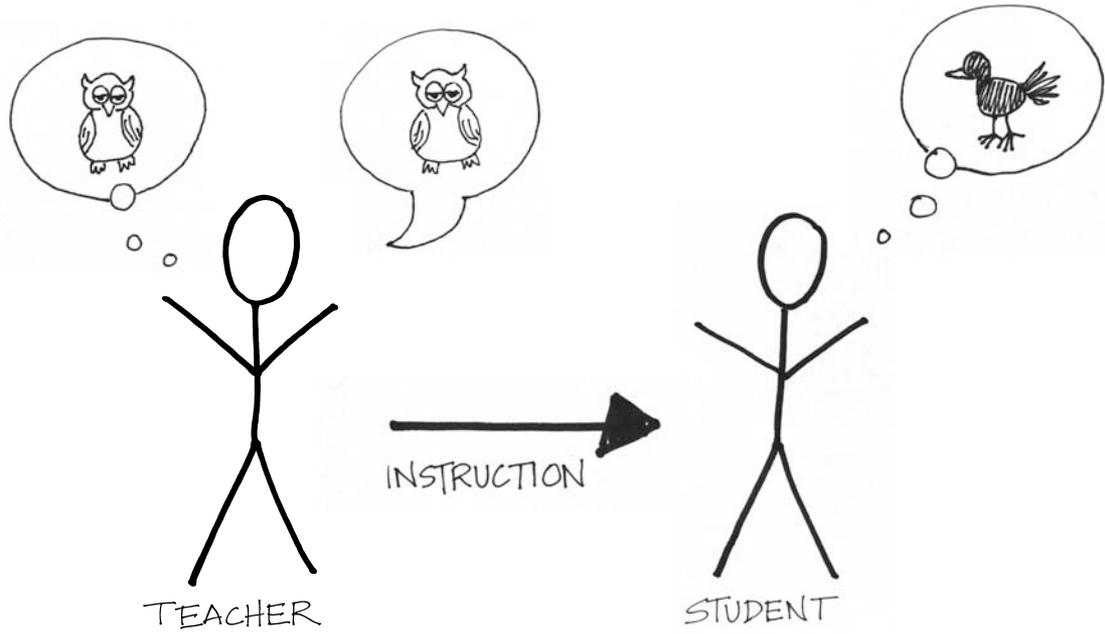








	Statistical Definition	Classroom Emphasis
Reliability	The extent to which an assessment is able to produce consistent data.	The extent to which an assessment consistently measures what it is supposed to measure.
Validity	The extent to which a conclusion is accurate and/or accurately corresponds to the real world.	The degree to which a teacher can make accurate inferences about student learning



Once upon a time,



A decorative border with ornate floral and scrollwork patterns in each corner and along the bottom edge.

**SOMETHING
WITH
NUMBERS**
PERFECT
DISTRACTION

BY W. W. W. W.

Data literacy is about understanding the story.



Data

What are they? How are they used?



- Critical Literacy
- Ecological Literacy
- Info Literacy
- Health Literacy
- Media Literacy
- Functional Literacy
- Web Literacy
- Statistical Literacy
- Arts Literacy
- Social Literacy



What does it mean to be literate?

Literacy = Having the knowledge and skills to function effectively within a particular context.



For Paulo Freire, author of *Pedagogy of the Oppressed*, becoming literate was also about power, ownership, and informed action (praxis).

Data Literacy

“Data literacy is the ability to interpret and use multiple data sources effectively to improve teaching and learning.”

- Nancy Love

Using Data to Improve Learning for All: A Collaborative Inquiry Approach

Classroom Assessment Literacy

“The knowledge and skills needed to gather accurate information...and use the assessment process and its results effectively to improve achievement.”

- Chappuis et al.
Classroom Assessment for Student Learning (2nd ed.)

NOT

Principal: I received our state test results earlier this week, and I've got nothing but good news to share. Our average score is in the 88th percentile – that's the highest it's been in the last 10 years. Congratulations to all of you, and keep up the good work.

Principal: Mr. Grant, we need to schedule an appointment to go over your class's test scores from earlier this year and talk about what we need to be doing in the coming months.

Teacher: I agree – but I already know those test scores don't paint an accurate picture of what's going on in my classroom now. Since my kids took their tests, I've seen a radical improvement in both math and reading skills using other assessments.

Principal: That's a valid point. In that case, can we augment our test score analysis with some more recent data? Also, I know you have been working on classroom procedures. When we meet, can we also look at the learning environment surveys you gave and see how things are improving?



Teaching has changed.

Yesterday and Today: What's the big difference?



The big change...

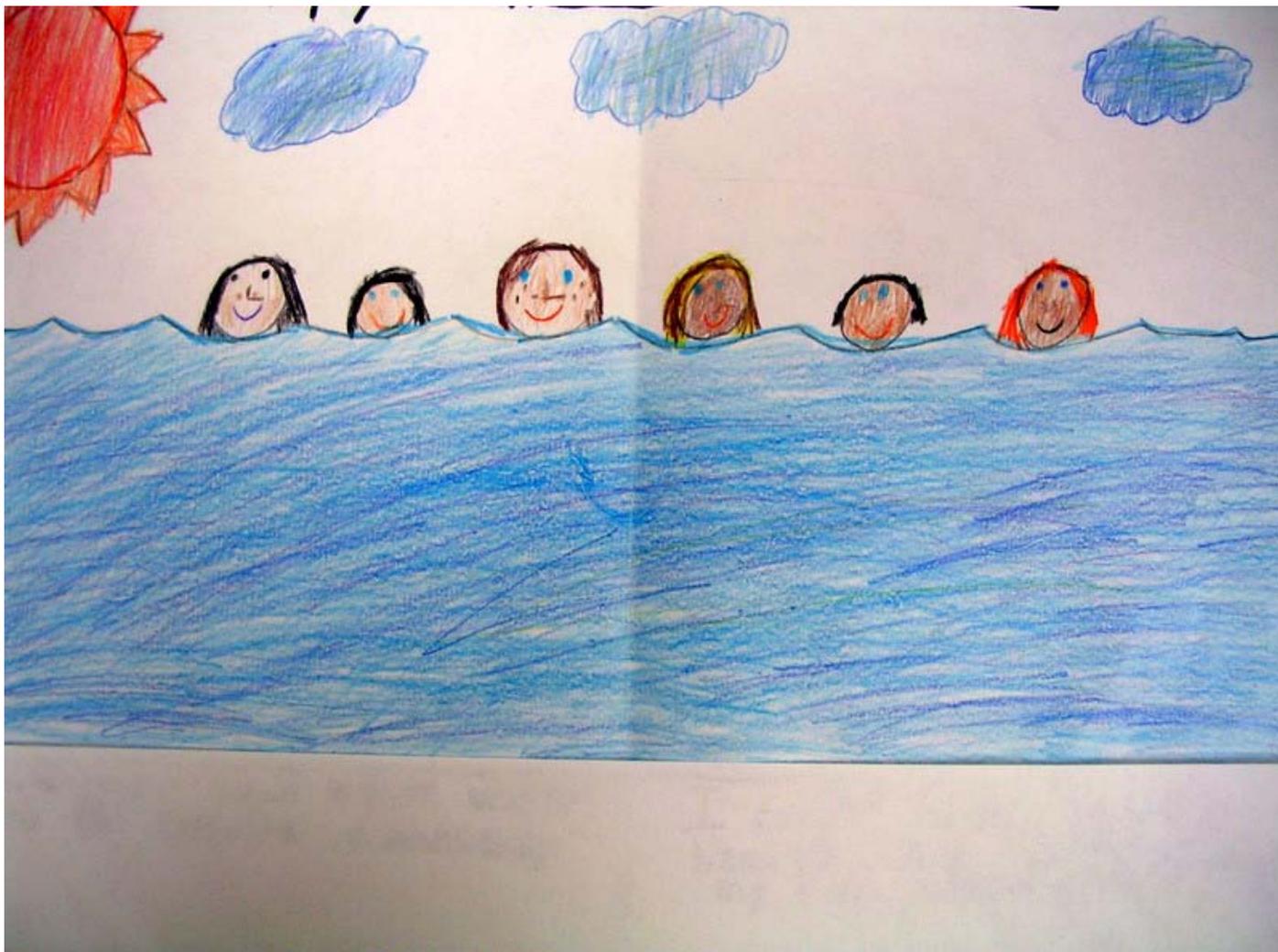


...has big ramifications.

Why don't
teachers jump
up and down
with
excitement
about data
and
assessment?



It means extra work and time.



It seems to require expert knowledge.



It's not expected.

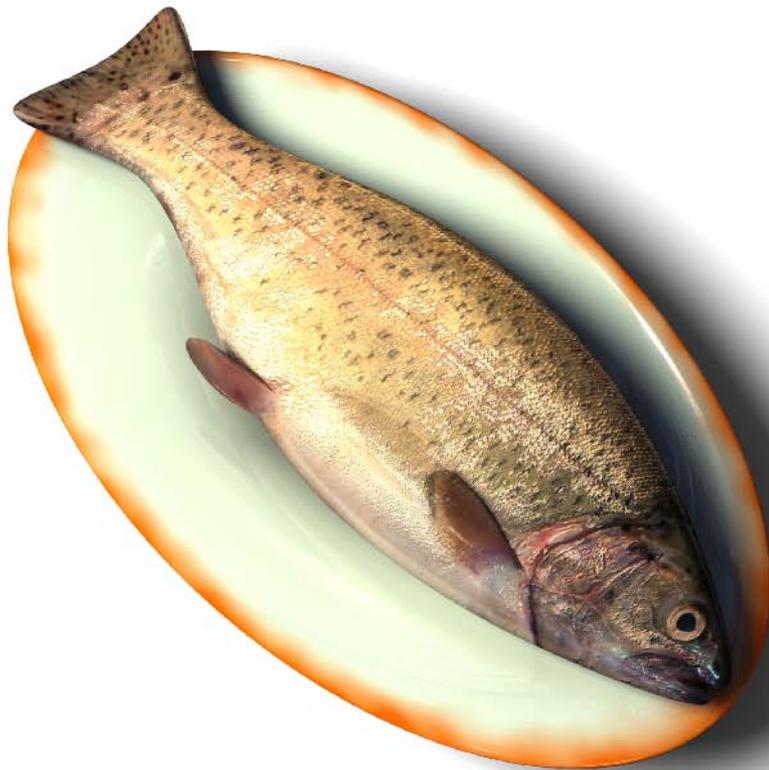
We've created a culture
where teachers tend to be
seen as vessels or
consumers, not
constructors of knowledge.



It's risky.



How do we
NOT build data
literacy?



It's about fishing.



Principles of Data Literacy

1. Understand what it means to be literate. Know the story and take ownership of it.
2. Recognize that data are not just standardized test scores.
3. Use multiple types of data to design instruction and make interventions.
4. Become critically conscious.
5. Assess on target (vs. on topic).
6. Encourage experimentation. Expect failure as part of the process.
7. Focus on relevant, classroom data that answer teachers' most important questions.
8. Get together, share data, and dialogue.

I am a teacher, consultant,
and national presenter. If
you have any questions or
would like more
information, do not hesitate
to contact me.



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