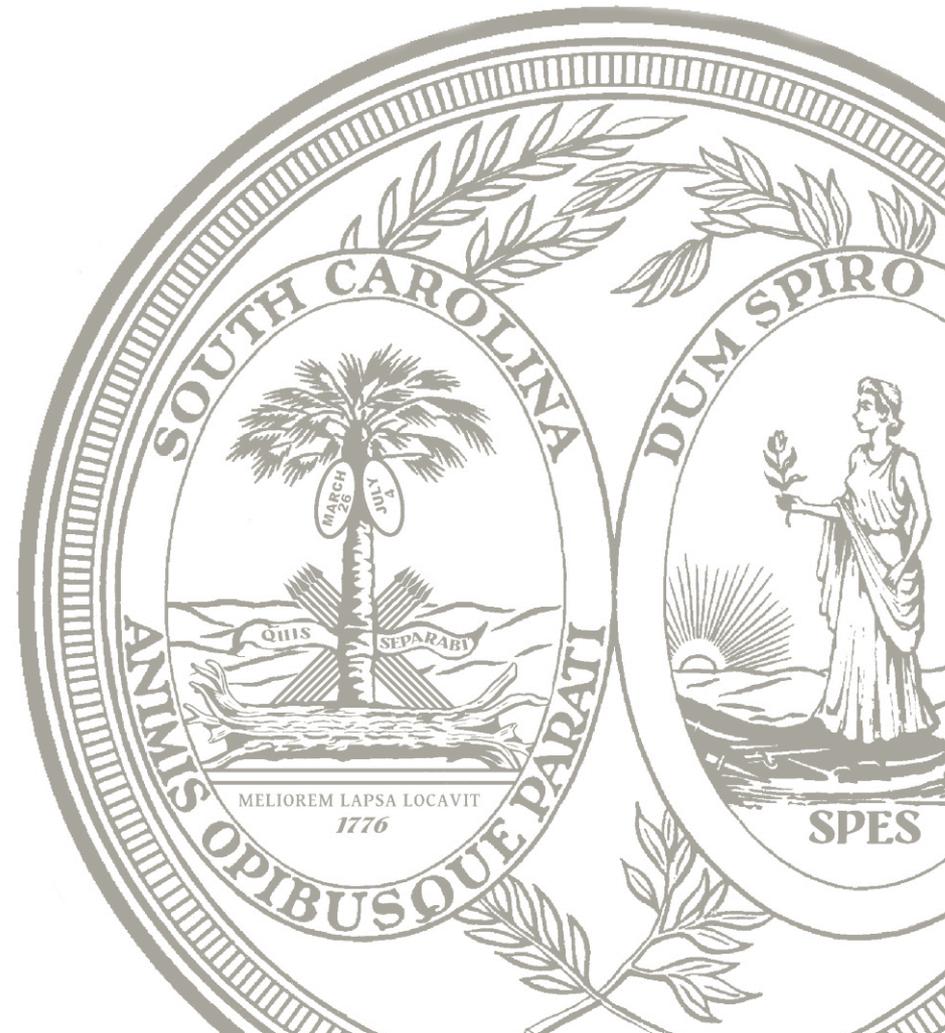


# Be (or Become) Data Literate

Part of Data Literacy for  
Instructional Leaders Series

**SCDE Office of Educator  
Effectiveness and Leadership  
Development**





# Facilitator

**Jennifer L. Morrison**

Chief Strategy Officer

SC Department of Education

Author of “Why Teachers  
Must be Data Experts,”  
(2008/2009), *Educational  
Leadership*, 66(4)



# Session Outcomes

- Apply the data and assessment story to your school.
- Assess classroom reliability and validity.
- Plan a whole-school data literate dialogue.
- Articulate what you can do to create the conditions for data literacy in your school.

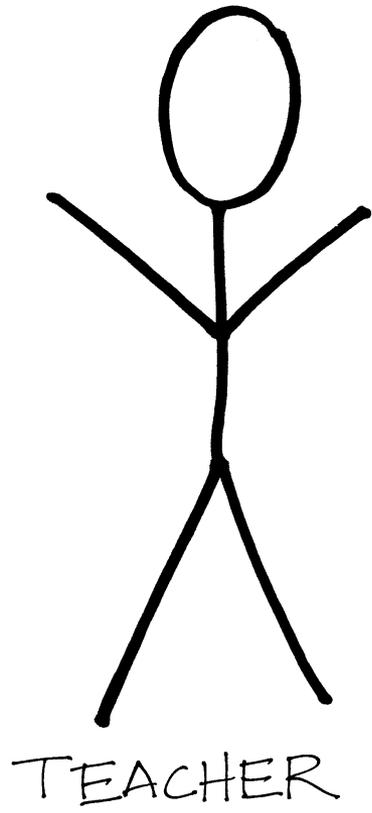
# PADEPP Standards

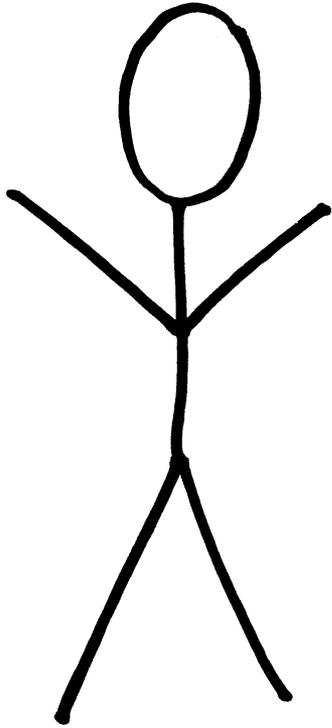
## Standard 4: Climate

- Initiates and maintains strategies to promote collegiality and collaboration among the staff to ensure high expectations for professional work, ethical and equitable practice, child-centered education, and continuous individual and organizational improvement.

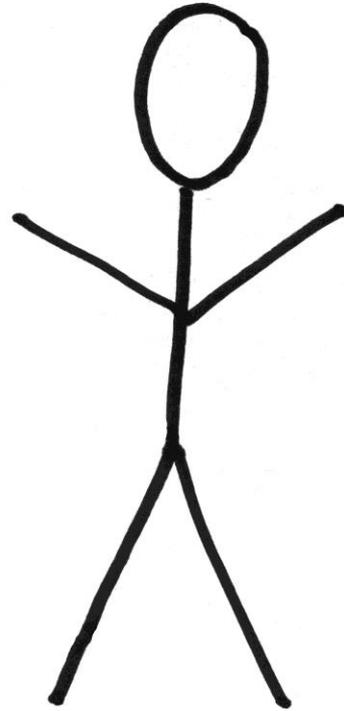
## Standard 7: Interpersonal Skills

- Collaborates with teachers and staff to monitor and improve performance on multiple measures of student progress.

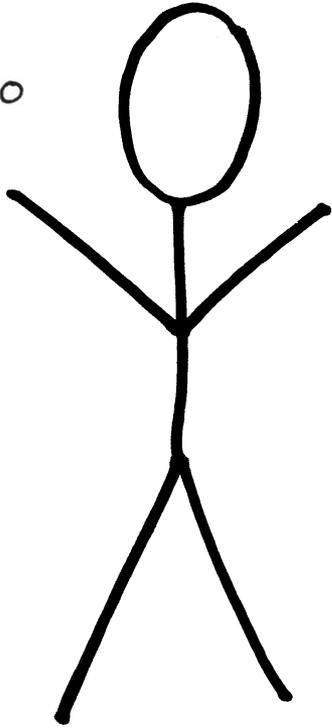
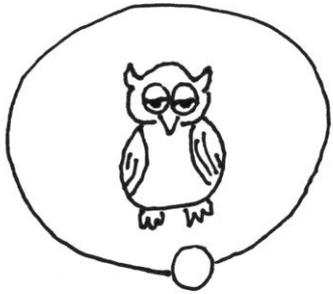




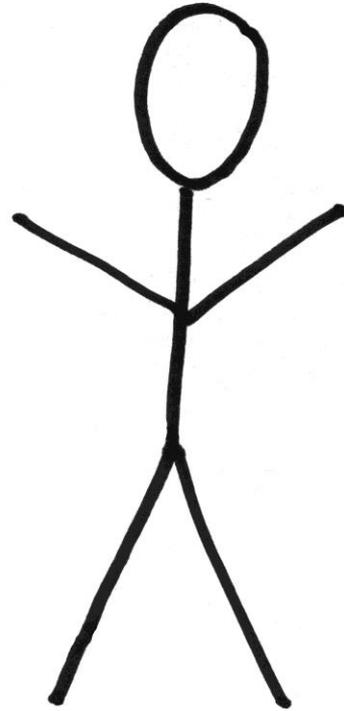
TEACHER



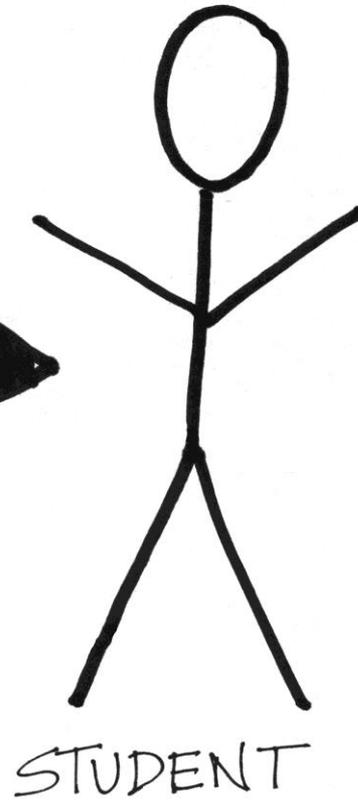
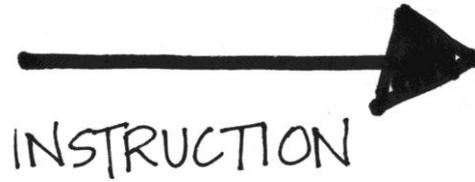
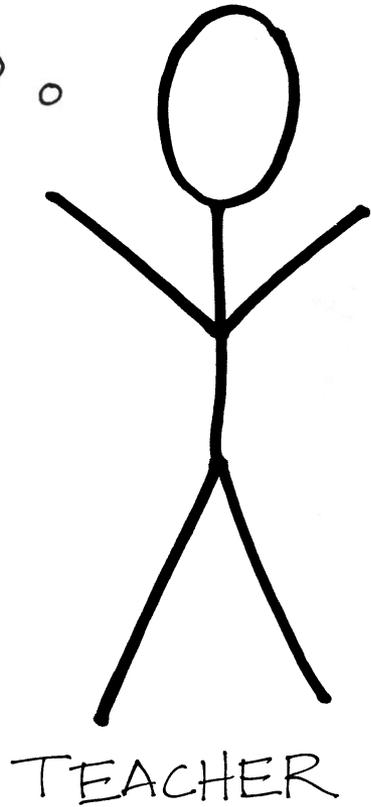
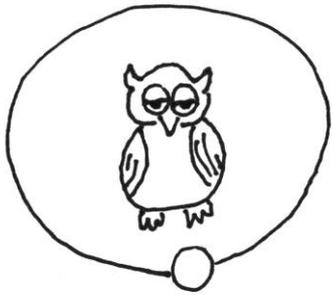
STUDENT

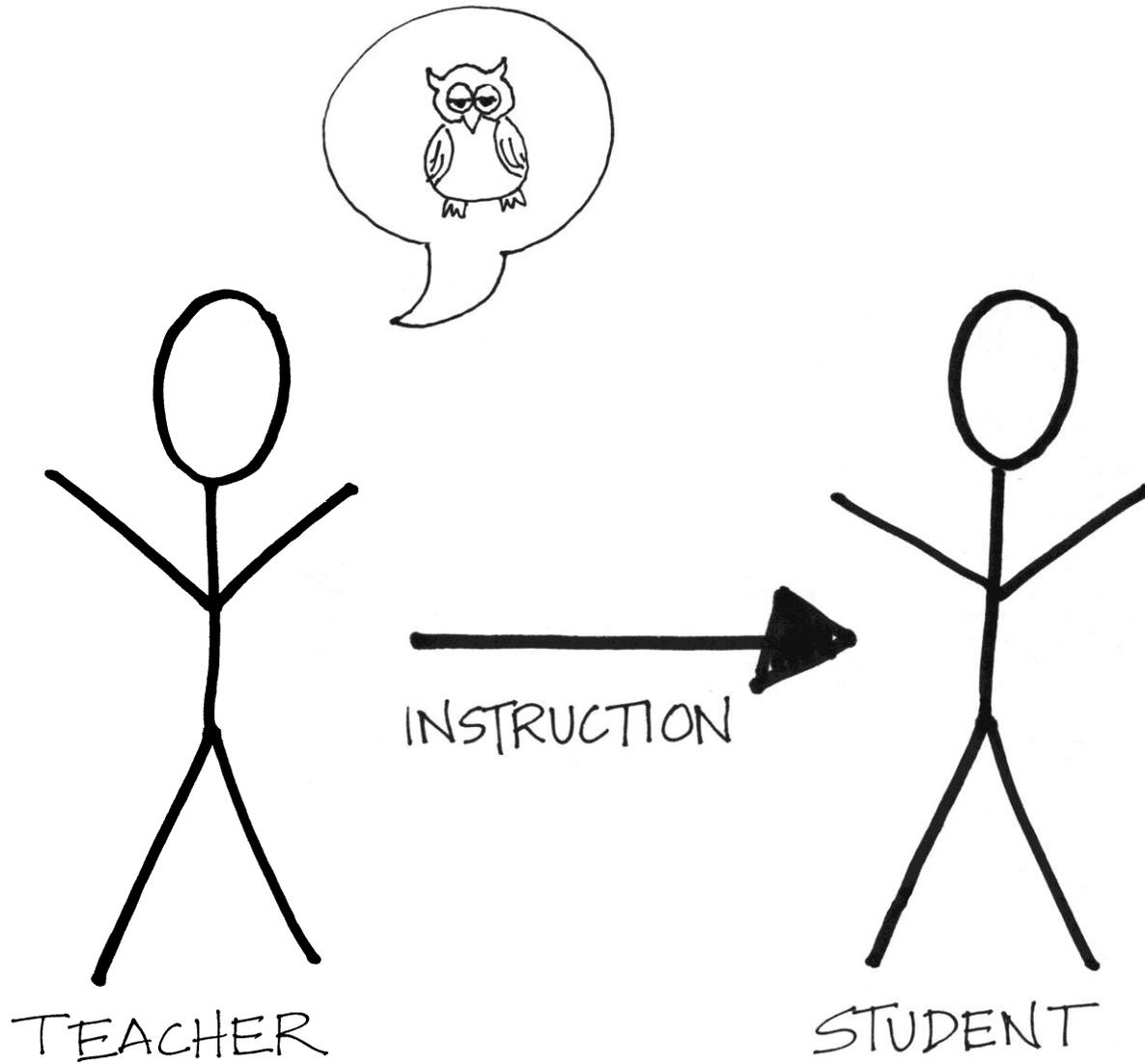


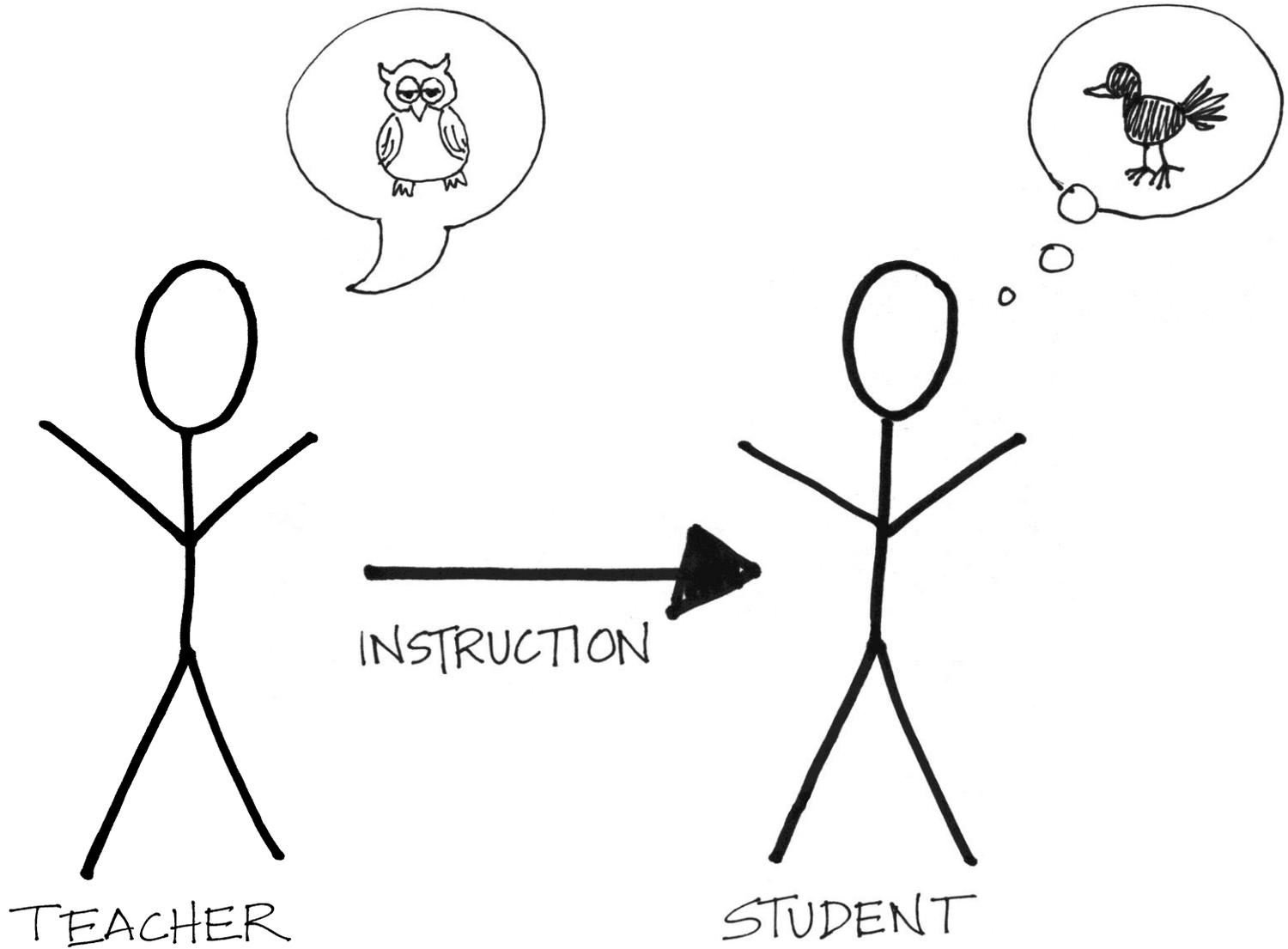
TEACHER

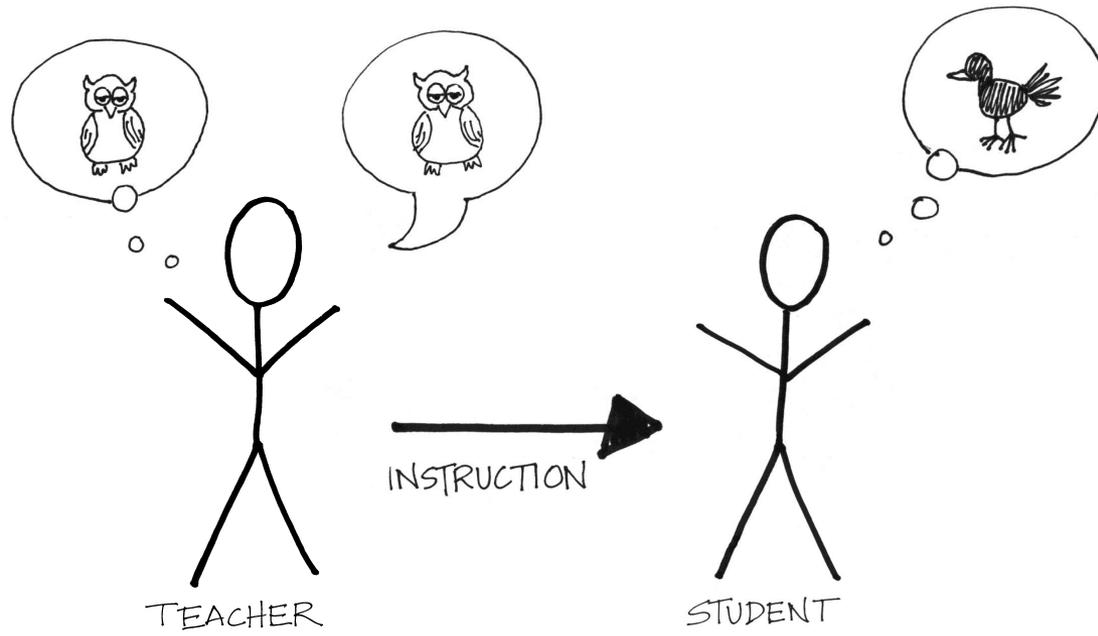


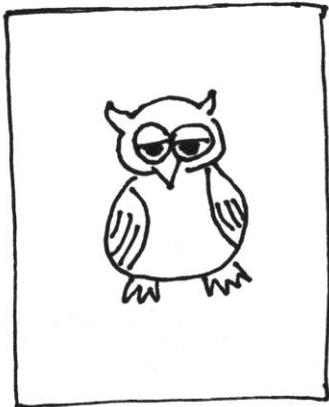
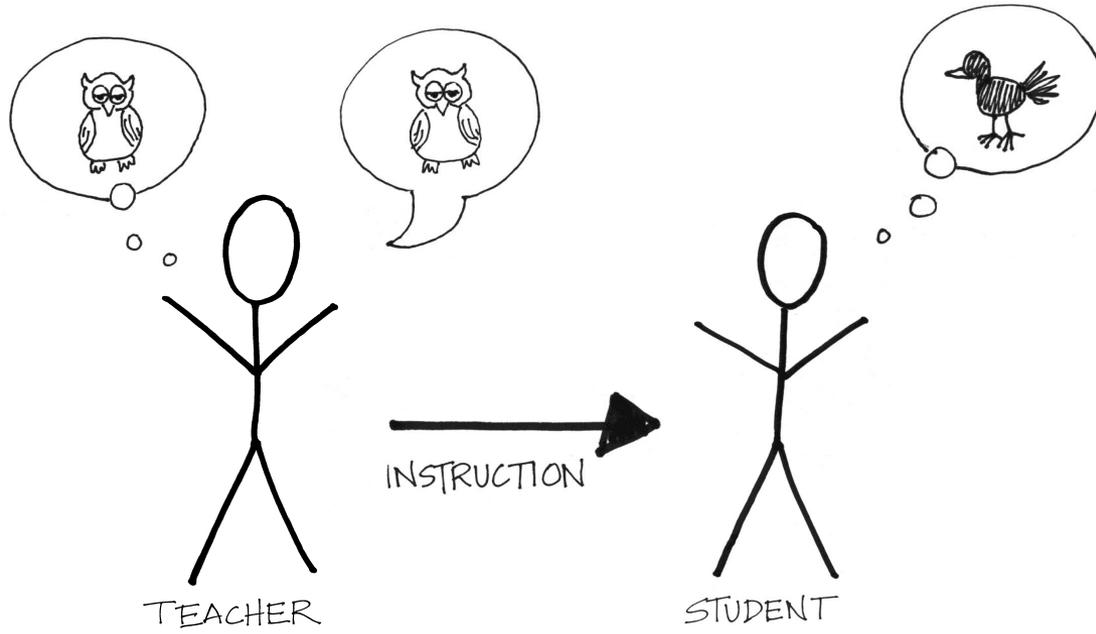
STUDENT

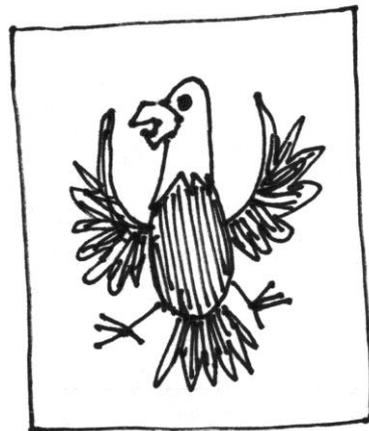
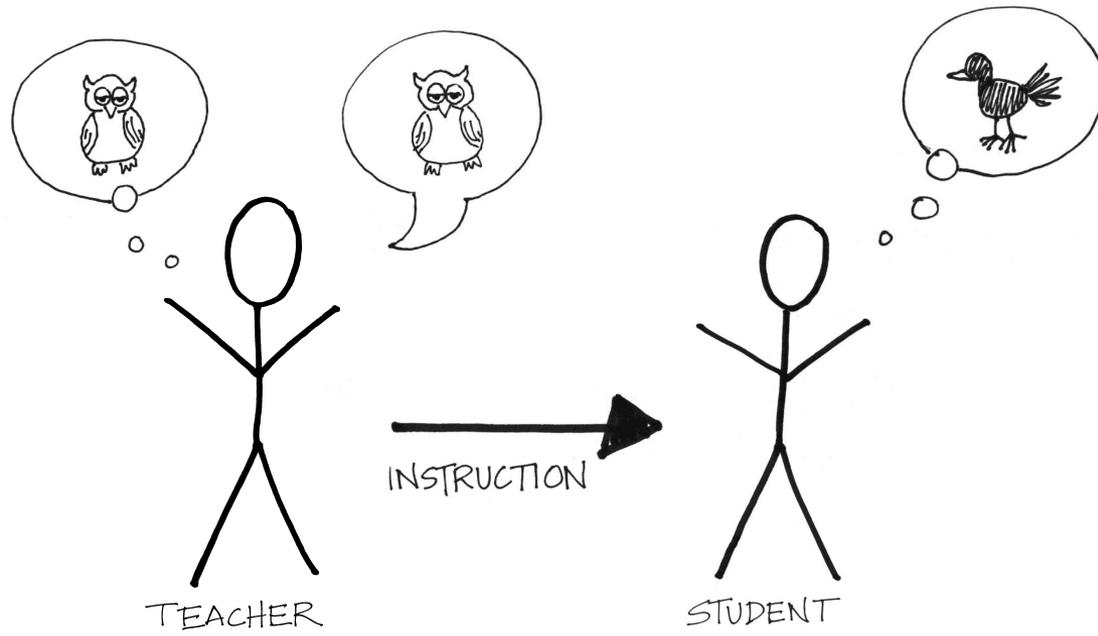


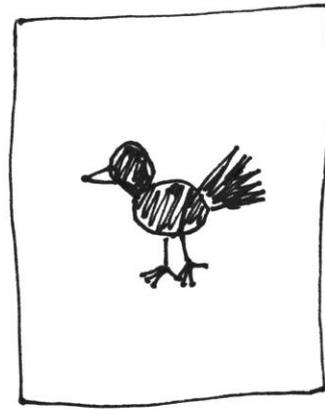
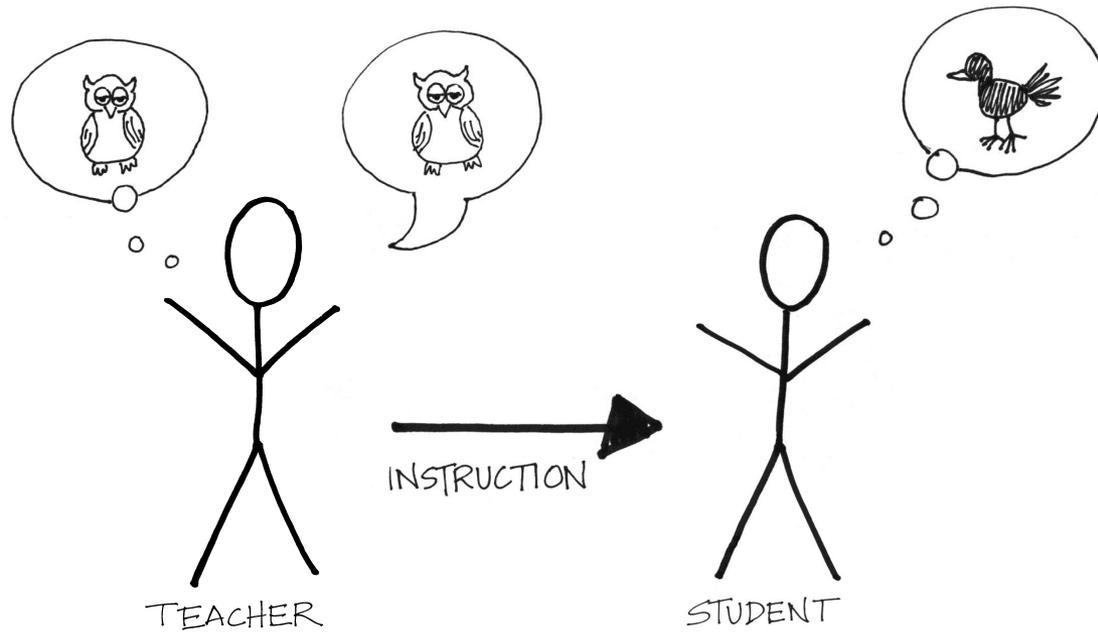












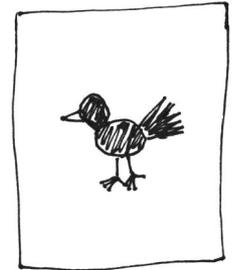
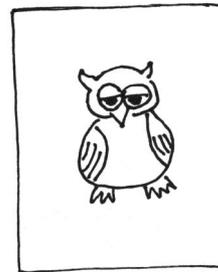
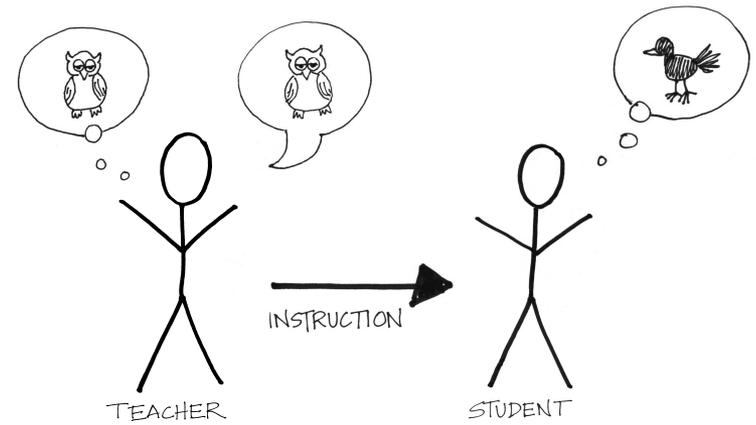
How does the data and assessment story apply to your school?



	Statistical Definition	Classroom Definition
<b>Reliability</b>	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.
<b>Validity</b>	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.



1. Which assessment has the most classroom reliability?
2. Which assessment allows the teacher to make valid inferences about student learning?





3. As an instructional leader, what do you have to help your teachers realize?

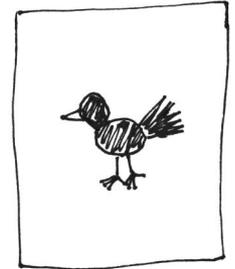
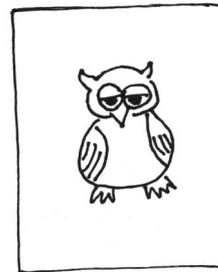
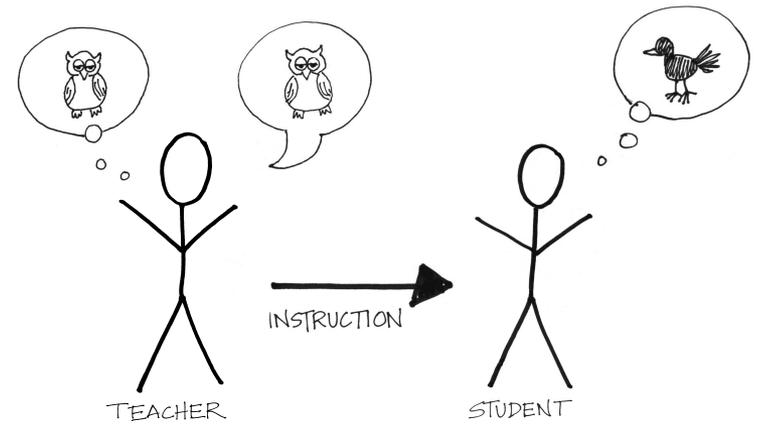




Image:  
<http://www.worknetdupage.org/images/blog/2016-June/defeat-distraction-stay-focused/distracted-during-job-search.jpg>

## **THIS:**

- Data-informed
- Student-centered
- Using data

## **NOT THAT:**

- Data-driven
- Assessment-centered
- Collecting data

Data literacy is the ability to gather, interpret, and use multiple data sources effectively to improve student learning.



## **THIS:**

- Habit or mindset
- Commitment and leadership
- Continuous improvement in long-term

## **NOT THAT:**

- Workbook
- Compliance
- Guaranteed test scores in short-term

# Data Literate Dialogue



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 88<sup>th</sup> 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?

# Characteristics of a Data Literate Dialogue

- Two-way; Equal (both parties are bringing work/data to the conversation)
- Not one-shot
- Uses multiple sources of data
- Participants make valid inferences and gain a reasoned understanding of the data
- Focused on instruction
- Focused on inquiry (questions)

How could the whole- school  
data literate dialogue.





Teaching has changed.

# Yesterday and Today: What's the big difference for teachers?



Yesterday and Today:  
What's the big difference for  
principals?





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



Picture: <http://www.idiomsbykids.com> – “Keep your head above water”

It means extra work and time.

# It seems to require expert knowledge.

- How many types of data are there? What data are most useful? When?
- What is the essential difference between formative and summative assessments?
- What makes my assessments reliable? What makes my decisions based on assessments valid?
- How should assessments inform instruction? How do I use assessments to differentiate? To intervene? To rethink my teaching? To focus on content standards?
- In standardized testing, how is growth defined in value-added measures? What is a standard deviation? What knowledge and skills do students need to be successful on standardized assessments?
- What data do my administrators need? My students? Their families? How can I help students and their families?

It's not expected.

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



It's risky.



It doesn't answer their questions.



Picture: <http://www.evilinglish.net/wp-content/uploads/2017/04/blahblah.jpg>

Given the necessity but also why teachers may not embrace data, what are two things you can do to create the conditions for data literacy in your school?





## I can...

- Apply the data and assessment story to my school.
- Assess classroom reliability and validity.
- Plan a whole-school data literate dialogue.
- Articulate what I can do to create the conditions for data literacy in my school.

# Application

*Plan and Facilitate a  
Whole-School Data  
Literate Dialogue*

Please complete the professional learning activity associated with this session to help you apply your learning.



Image:  
<http://blog.atomiclearning.com/highed/sites/blogs.atomiclearning.com/files/images/bigstock-lightbulb-vector.png>

# References

Blankstein, A. M. (2004). *Failure is NOT an option: Six principles that guide student achievement in high-performing schools*. Thousand Oaks, CA: Corwin Press.

## Associated Reading

Chappuis, J., Stiggins, R., Chappuis, S., & Arter, J. (2012). *Classroom assessment for student learning: Doing it right – using it well* (2<sup>nd</sup> ed.). Boston, MA: Pearson Education, Inc.

Love, N. (Ed.) (2009). *Using data to improve learning for all: A collaborative inquiry approach*. Thousand Oaks, CA: Corwin Press.

Morrison, J. L. (2008/2009). Why teachers must be data experts. *Educational Leadership*, 66(4).