

SWRK 607

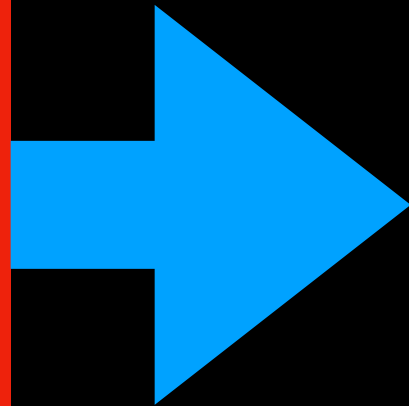
Applied Statistics

Using Acrobatic Adaptive Learning Program

Three Sections
Total of 27 Students

Transition

Flipped
Class



Adaptive
Hybrid

Section One

Active Duty Army Captain

VA Hospital Middle Manager

Army Brat

Army Veteran

Army Spouse

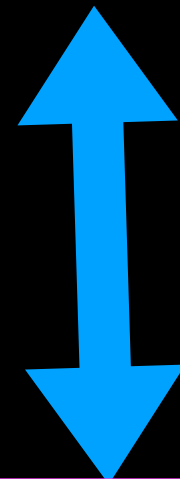
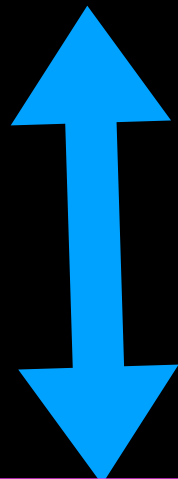
Army Spouse



Different Terminology

What I have used in 30 years of teaching:

Dependent and **Independent** Variables



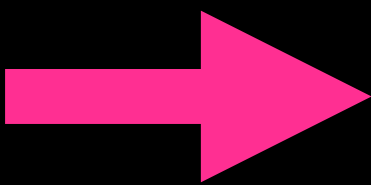
The Acrobatic way:

Response and **Explanatory** Variables

Average Time per Week Spent on Acrobatic (Self Reported)

Traditional Standard:
Two hours out of class
for every hour in class

Actual data from instructor
dashboard showed at end of
fifth week, this student logged
on 4 times and the average
session length was 1 hour and
35 minutes.



Before Acrobatic	After Acrobatic
3	8
2	5
4	3
4	2
4	2
2	3.5
3.5	7
2	6
3	7

Highest Quiz Scores

Which students are having difficulties?



Viewing: Students information for All Students

PIVOT

- ☐ Learning Objectives
- ☒ Students

One learning objective at time

LEARNING OBJECTIVES

- ☒ All Learning Objectives
- ☐ Select Learning Objective(s)

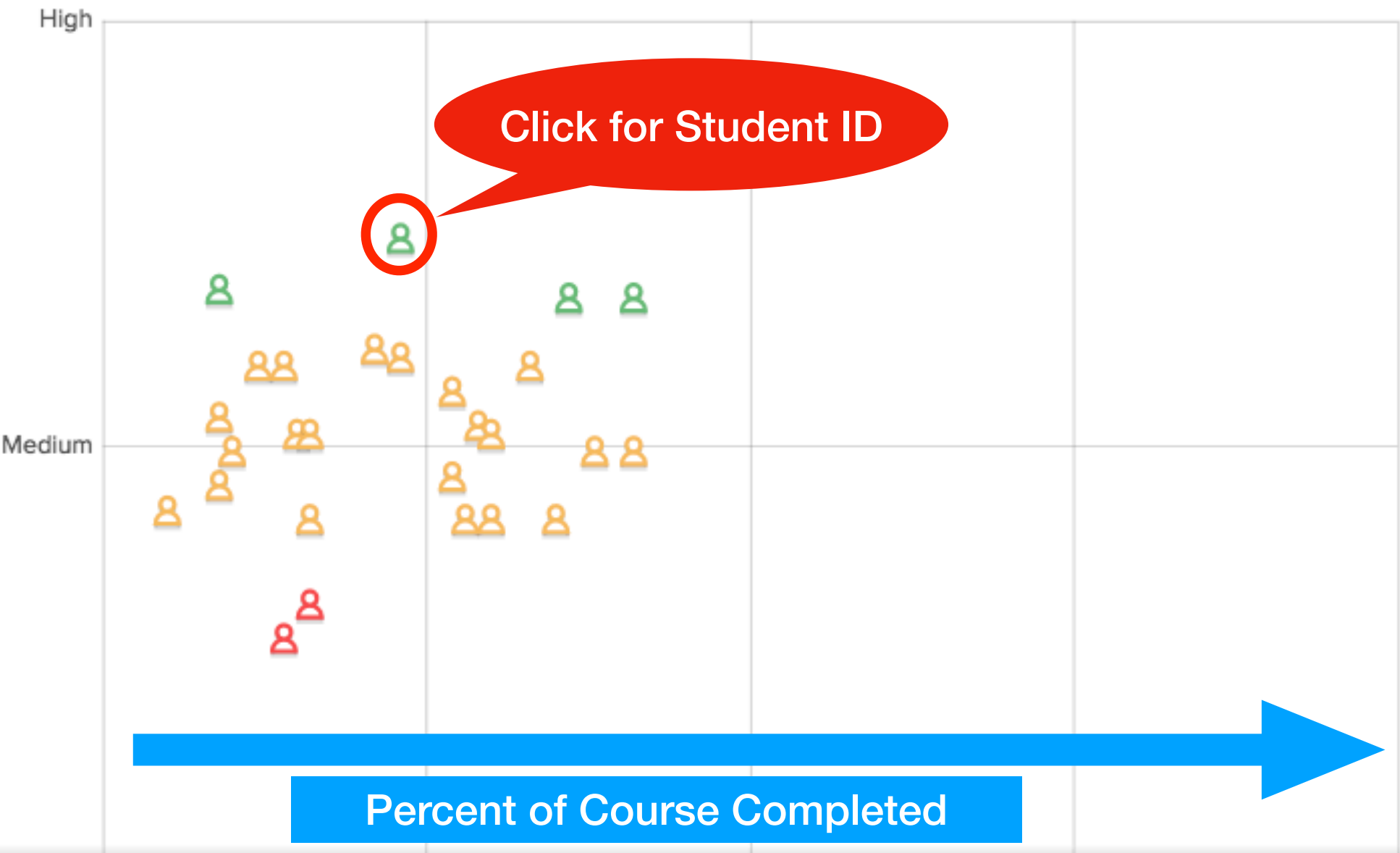
POPULATION

- ☒ All Students
- ☐ Select Students

GRAPHIC INDICATOR

Low ● ● ● High ● Need More Info

% LEARNING ESTIMATE [i](#)



Feedback

- ⦿ This study is an experiment, since it was based on a random sample.
- This study is an experiment, since each incident was classified into one of the several possible combinations of severity and driving behavior.
- This study is a combination of both an experiment and an observational study.
- This study is an observational study, since researchers did not assign the drivers to be involved in an incident or not, nor to one of the driving behaviors.





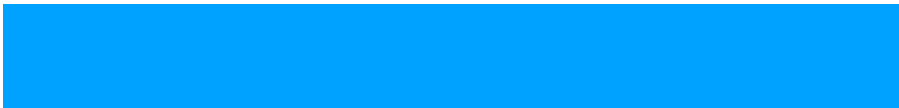






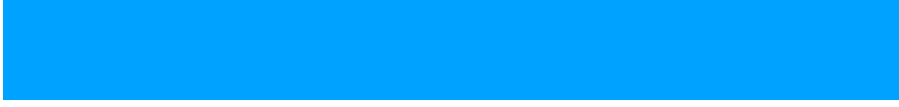
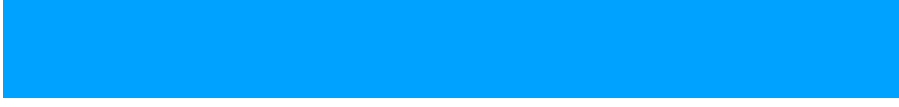
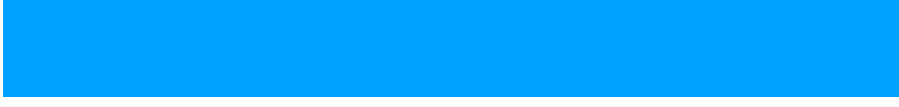
Feedback

- ✗ This is not quite right. Remember that the *sampling* method isn't what determines whether something is an experiment. Think about the other choices.

Evaluate your ability to perform each of the following tasks. In other words, how well can you do each task?

	Not at all yet	With a lot of support	With some support	With minimal support	On my own
Identify the design and other features of a study*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Understand how the design of a study impacts the type of conclusions that can be drawn*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Determine how the features of a survey impacts the quality of the collected data*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

* Required questions

Student Name 	Learning estimate  	Activity Completion 
	Medium	14%
	High	41%
	High	9%
	Medium	28%
	Medium	15%
	Medium	23%
	Medium	35%
	Medium	9%
	High	36%
	Medium	33%

Which students are having difficulties?



Viewing: Students information for All Students

PIVOT

☐ Learning Objectives

☒ Students

One learning objective at time

LEARNING OBJECTIVES

☒ All Learning Objectives

☐ Select Learning
Objective(s)

POPULATION

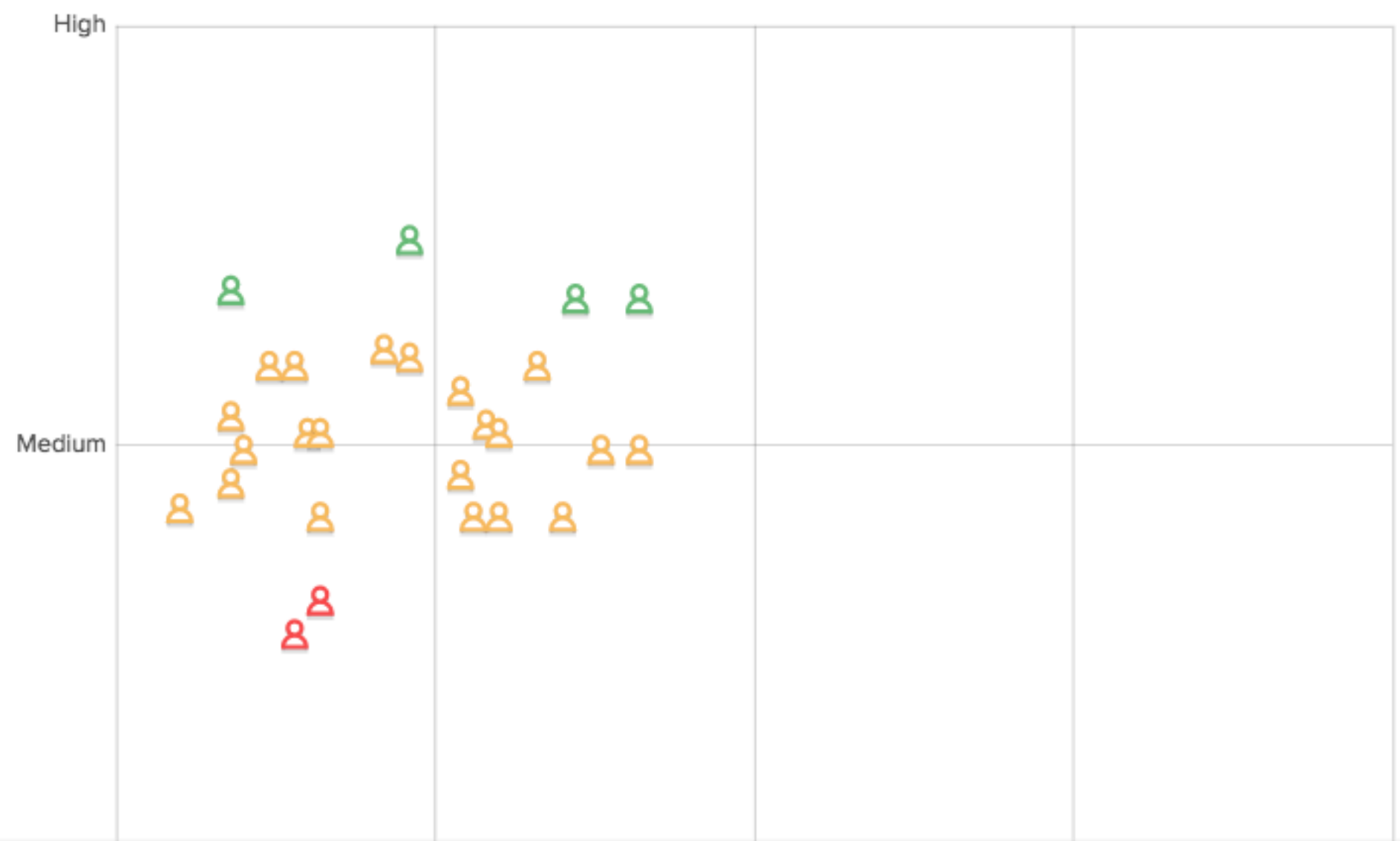
☒ All Students

☐ Select Students

GRAPHIC INDICATOR

Low ● ● ● High ● Need More Info

% LEARNING ESTIMATE 



Viewing: Learning Objectives information for All Students

PIVOT

☒ Learning Objectives

☐ Students

One learning objective at time

LEARNING OBJECTIVES

☒ All Learning Objectives

☐ Select Learning
Objective(s)

POPULATION

☒ All Students

☐ Select Students

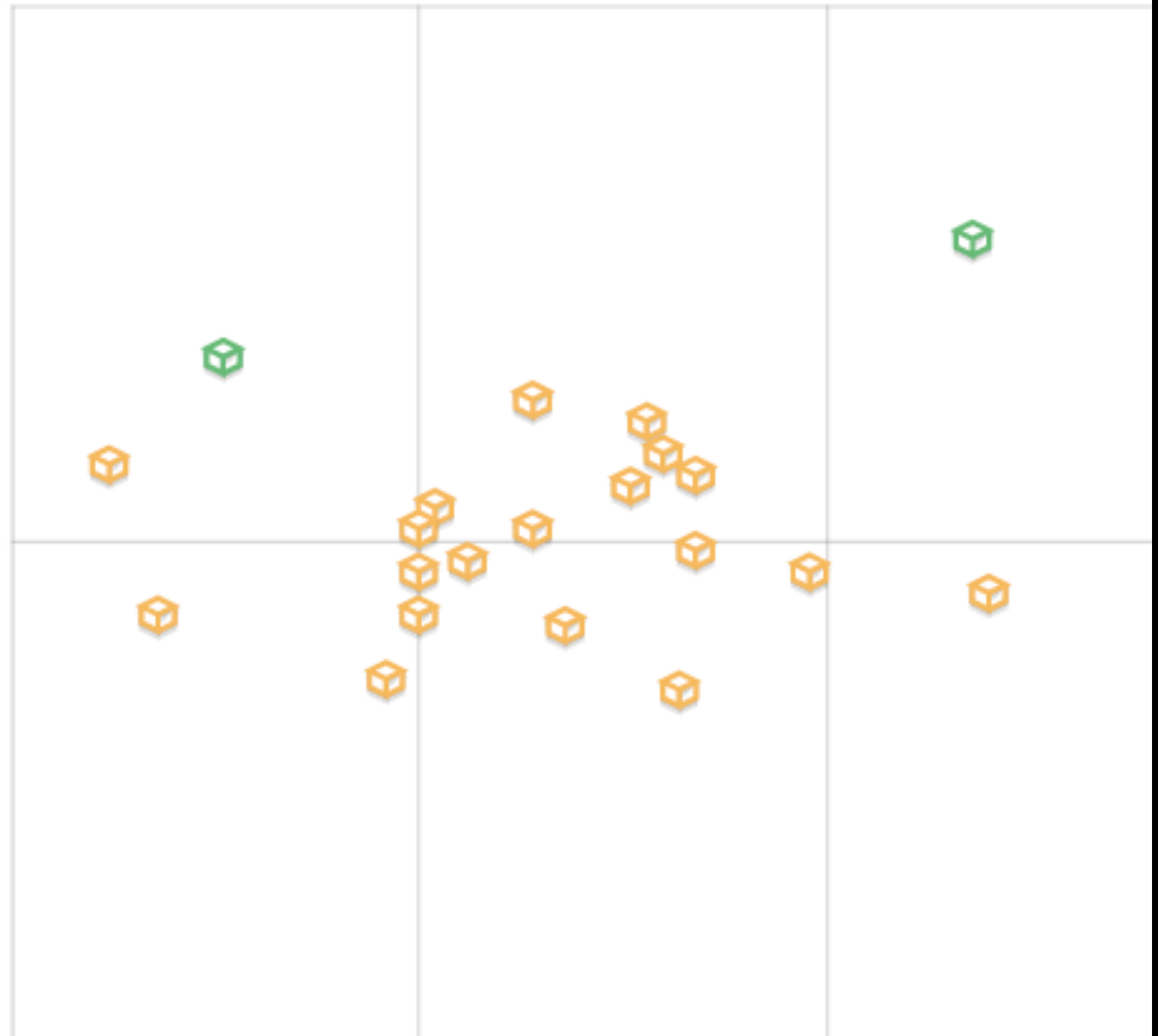
GRAPHIC INDICATOR

Low ● ● ● High ● Need More Info

% LEARNING ESTIMATE [i](#)

High

Medium



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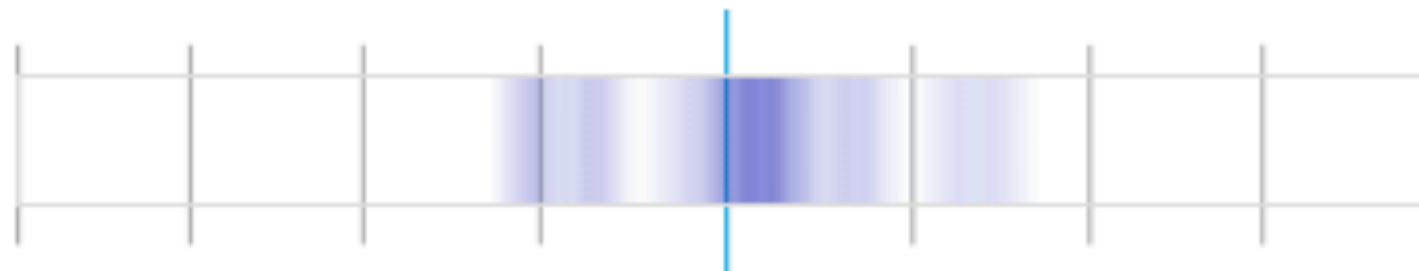
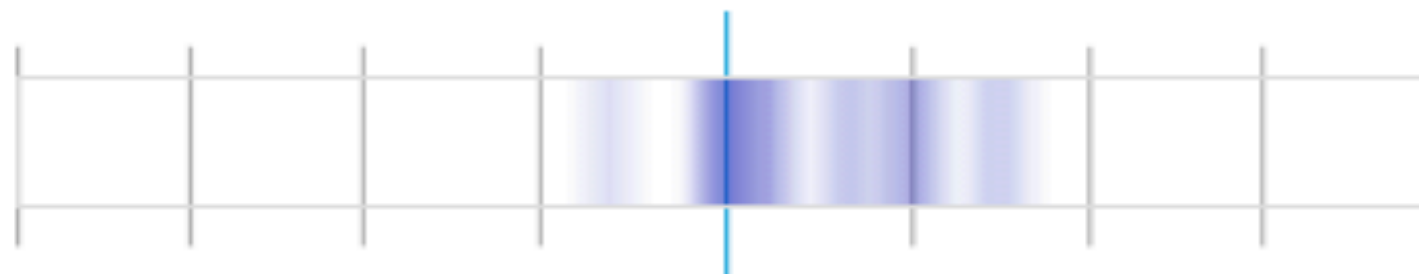


How well are my students self-assessing?








Module 1: Examining Distributions

Participating



Underconfident

Overconfident

	This course	All courses		
Student name 	Page visits 	Platform logins 	Last platform logins 	Avg. session length 
Camps, Theresa	550	77	2018-02-20 03:18 AM	00:28:25
Witt, Laressa	447	36	2018-02-18 03:06 AM	00:43:00
Cratch, Al-Nisa	357	32	2018-02-20 03:31 AM	00:36:16
McKoy, Donna	177	31	2018-02-18 03:02 PM	00:20:47
Bradford, Bria	389	27	2018-02-19 02:44 AM	00:49:50
Balaam, Zhana	386	26	2018-02-18 12:38 PM	00:44:55
Conde-Williams, Annie	276	26	2018-02-19 11:50 PM	00:37:53
Alonzo-Brillant, Kerstin	307	23	2018-02-19 05:32 PM	00:46:03
Floyd, Kymberly	305	18	2018-02-13 02:41 AM	00:41:25
Zachary, Sharice	127	17	2018-02-16 11:10 PM	00:26:08

Viewing: Time Spent information for [redacted]

SELECT DATA SET

- ☐ Accuracy
- ☐ Activity Completion
- ☐ Pages Viewed
- ☒ Time Spent

POPULATION

- ☐ All Students
- ☒ Select Students

Enter a student name





CHECK ALL UNCHECK ALL

- ☒ Alonzo-Brilliant, Kerstin
- ☐ Balaam, Zhana
- ☐ Bonsu, Amaquah
- ☐ Bradford, Bria
- ☐ Camps, Theresa

Copy Excel PDF

Show entries Search:

Module	Accuracy	Activity Completion	Pages Viewed	Time Spent
Learning Strategies	88.89 %	71.43 %	80 %	00:18:08
Introduction	0 %	0 %	100 %	00:10:45
Getting Ready	82.14 %	29.41 %	45 %	00:13:34
Exploratory Data Analysis	92.31 %	100 %	100 %	00:35:12
Examining Distributions	64.12 %	83.72 %	100 %	01:52:56
Examining Relationships	83.12 %	86.84 %	100 %	02:37:04

Learning Objective 	Learning estimate  	Activity Completion 
Understand the structure of a data set and identify different type of variables.	Medium	42%
Generate graphical displays of the distribution of a quantitative variable and use them to summarize the overall pattern of the distribution.	Medium	23%
Generate numerical measures of center and measures of spread of the distribution...	Medium	9%
Summarize the relationship between a categorical explanatory variable and a quantitative response variable by comparing distributions of a quantitative variable across several groups.	Medium	41%

Positives

Negatives

**“We don’t need you
anymore” Dr. Dilday**