COLORADO
Department of Education

Drive Your Data

Webinar

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Workshop Objectives

- To help SCC counselors be more effective in their practice
- To help SCC counselors be more comfortable looking at and working with data
- To provide ideas on how to share data with stakeholders to drive decisions

WHAT'S YOUR NEW YEARS RESOLUTION, MRS. MERRITT?
TO DELVE MORE DEEPLY INTO MY DATA TO INCREASE STANDARDIZED TEST SCORES! WHAT'S YOURS?
TO GET TO KNOW MY STUDENTS BETTER AS PEOPLE SO I CAN DO A BETTER JOB OF HELPING THEM TO BECOME LIFELONG LEARNERS.
YOUR RESOLUTION DOESN'T EVEN MENTION DATA!
YOURS DOESN'T EVEN MENTION STUDENTS.

ASCA National Model

Comprehensive in Scope
Preventive in Design
Developmental in Nature
Integral Part of the Total Educational Program
Designs a Delivery System
Conducted in Collaboration
Monitors Student Progress
Driven by Data
Seeks Improvement
Shares Successes

DATA!

"It seems so overwhelming, I have no idea, what DATA I am supposed to be collecting and using!"

"I don't understand how to use data in school counseling."

"What kind of data do they want?"

"Data doesn't measure what we do!"

"When will I have time to collect and analyze data?"

"We collect data, I just don't know if it is the right stuff."

Data	Data Source	Where I Can Gather data….
Standardized testing • CMAS • Access/CELA	CDE Website - Schoolview	•Principal •Instructional coach •Infinite campus •Naviance
Purchased Curriculum/Testing • SAT/PSAT	ACT/Collegeboard)	•Testing Coordinator •Principal •SOARS
The school's yearly goals and plan for achieving the goals	The school's UIP	•Principal
Attendance, Discipline, Grades, Assessment Data, Course Enrollment Patterns	Student Information Systems (Infinite Campus, Powerschool, SASI etc.) System/Administrators	•Infinite Campus •Assistant Principal •Attendance Secretary •Special Ed./ILP/ELL
ICAP's • Career pathways • First generation • Future plans/goals	CIC, Naviance, Paper copy	•Naviance •College in Colorado

Data	Data Source	
Systems analysis	Discipline, Grading Scale Policy, Promotion, Retention, School Safety Surveys	Infinite Campus Surveys Needs assessments Evaluation of school policies and practices
Counselor Interactions	You! (notes, email, phone log)	Microsoft Outlook
Student, Faculty, and Family Needs	Surveys, Needs Assessments	Make your voice heard survey Tell survey
Pre-Post Tests	Given before and after an intervention to determine knowledge gained or to measure a change in perspective	
SES info.	Check school, sometimes confidential	

Disaggregation of Data

What is disaggregation?

- Disaggregation: To break up or to break apart
  - http://www.thefreedictionary.com/Disaggregation
- What are different ways that we can disaggregate data? We can look at data in so many ways, comparing any given variable (i.e. grade distribution) by different criteria.
  - Grade
  - Gender
  - Race/ethnicity
  - Attendance rate
  - IEP/ILP
  - 504

Why disaggregate data?

If we effectively disaggregate data, we can identify trends and/or areas for which intervention is necessary.

- Achievement gaps between different populations
- Troubling grade distribution patterns by teacher, course, section, etc.
- Grade distribution for students with different attendance patterns

Using Data to Uncover Inequities

Ask questions….

- What do I want to know about my school's ability to educate all students?
- What questions do I have about my students?, My school community?
- What concerns you about your data?
- Does an achievement gap exist? Where?
- What additional information do you need?
- What should you focus on? What data should you collect?

Where to get results data

Ad Hoc reports through your student information systems

- Talk to your registrar, counseling secretary, IT department, and/or other personnel who consistently work with data to learn how to run reports.
- Generally, once you create a report, you only need to tweak it a bit each time new grades are run.

What to do with reports once I have run them?

- Most reporting features allow you to download reports into Microsoft Excel.
- Excel has amazing sorting capabilities.
- The most amazing of them all are “pivot tables.”

A closer look at real data

Let's look at an actual report reflecting grades from a specific grading period at a real area high school.

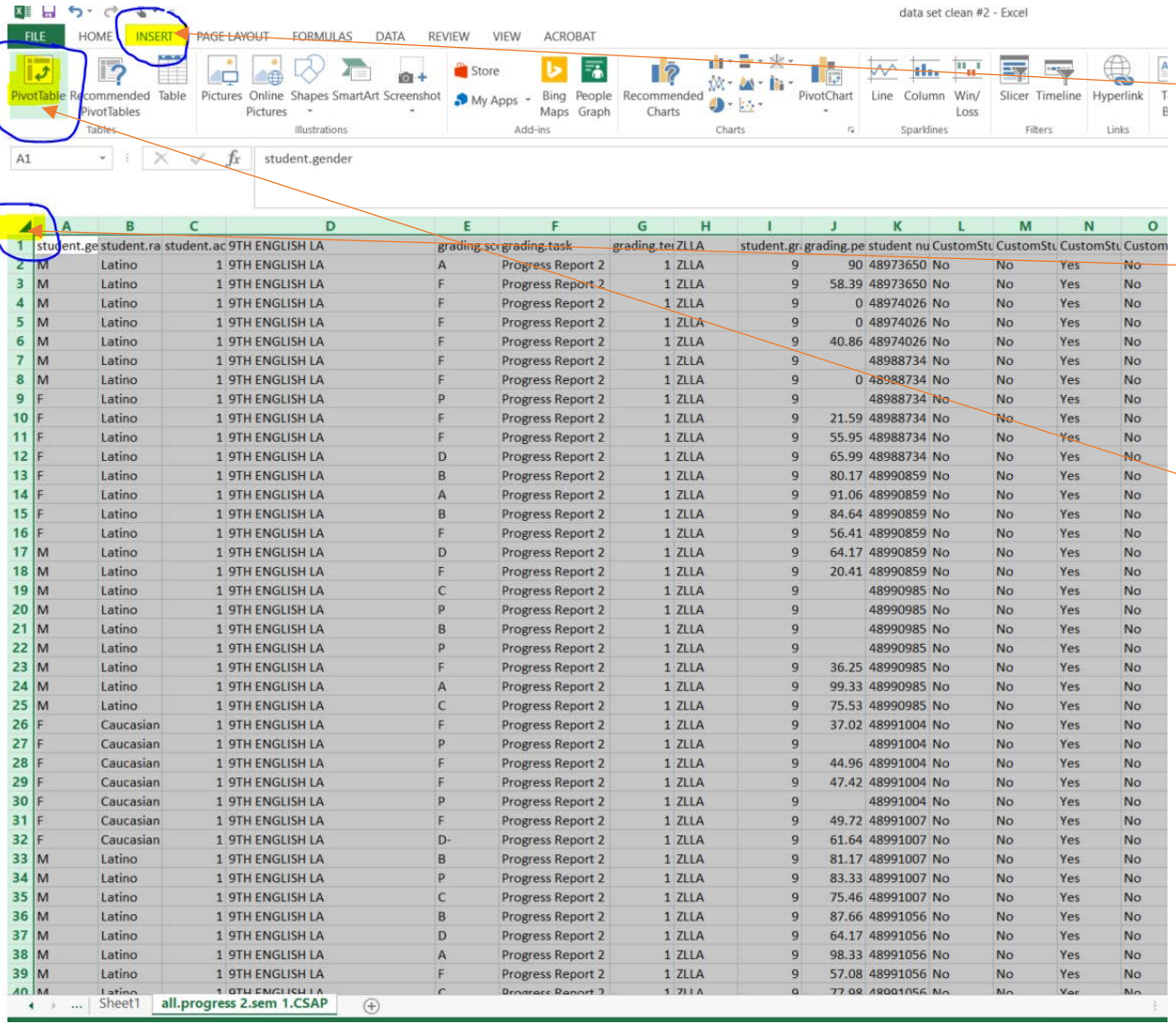
We will look at grade distribution by grade, gender, ethnicity, and attendance rate.

How to create a pivot table (Slide 1 of 8)

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X
	student.ge	student.ra	student.ac	9TH ENGLISH LA	grading.sc	grading.task	grading.te	ZLLA	student.gr	grading.pe	student nu	CustomStu	CustomStu	CustomStu	CustomStu	student.en	CustomStu	CustomStu	grading.te	CustomStu	CustomStu	CustomStu	CustomStu	CustomStu
	M	Latino	1	9TH ENGLISH LA	A	Progress Report 2	1	ZLLA	9	90	48973650	No	No	Yes	No		8/1/2012	47.04	1	Unsatisfac	9	Unsatisfac	1	Unsatisfac
	M	Latino	1	9TH ENGLISH LA	F	Progress Report 2	1	ZLLA	9	58.39	48973650	No	No	Yes	No		8/1/2012	47.04	1	Unsatisfac	9	Unsatisfac	1	Unsatisfac
	M	Latino	1	9TH ENGLISH LA	F	Progress Report 2	1	ZLLA	9	0	48974026	No	No	Yes	No		8/1/2012	47.04	1	Unsatisfac	9	Unsatisfac	1	Unsatisfac
	M	Latino	1	9TH ENGLISH LA	F	Progress Report 2	1	ZLLA	9	0	48974026	No	No	Yes	No		8/1/2012	47.04	1	Unsatisfac	9	Unsatisfac	1	Unsatisfac
	M	Latino	1	9TH ENGLISH LA	F	Progress Report 2	1	ZLLA	9	40.86	48974026	No	No	Yes	No		8/1/2012	47.04	1	Unsatisfac	9	Unsatisfac	1	Unsatisfac
	M	Latino	1	9TH ENGLISH LA	F	Progress Report 2	1	ZLLA	9		48988734	No	No	Yes	No		8/1/2012	47.04	1	Unsatisfac	9	Unsatisfac	1	Unsatisfac
	M	Latino	1	9TH ENGLISH LA	F	Progress Report 2	1	ZLLA	9	0	48988734	No	No	Yes	No		8/1/2012	47.04	1	Unsatisfac	9	Unsatisfac	1	Unsatisfac
	F	Latino	1	9TH ENGLISH LA	P	Progress Report 2	1	ZLLA	9		48988734	No	No	Yes	No		8/1/2012	88.07	1	Unsatisfac	1	Unsatisfac	9	
	F	Latino	1	9TH ENGLISH LA	F	Progress Report 2	1	ZLLA	9	21.59	48988734	No	No	Yes	No		8/1/2012	88.07	1	Unsatisfac	1	Unsatisfac	9	
	F	Latino	1	9TH ENGLISH LA	F	Progress Report 2	1	ZLLA	9	55.95	48988734	No	No	Yes	No		8/1/2012	88.07	1	Unsatisfac	1	Unsatisfac	9	
	F	Latino	1	9TH ENGLISH LA	D	Progress Report 2	1	ZLLA	9	65.99	48988734	No	No	Yes	No		8/1/2012	88.07	1	Unsatisfac	1	Unsatisfac	9	
	F	Latino	1	9TH ENGLISH LA	B	Progress Report 2	1	ZLLA	9	80.17	48990859	No	No	Yes	No		8/1/2012	88.07	1	Unsatisfac	1	Unsatisfac	9	
	F	Latino	1	9TH ENGLISH LA	A	Progress Report 2	1	ZLLA	9	91.06	48990859	No	No	Yes	No		8/1/2012	88.07	1	Unsatisfac	1	Unsatisfac	9	
	F	Latino	1	9TH ENGLISH LA	B	Progress Report 2	1	ZLLA	9	84.64	48990859	No	No	Yes	No		8/1/2012	88.07	1	Unsatisfac	1	Unsatisfac	9	
	F	Latino	1	9TH ENGLISH LA	F	Progress Report 2	1	ZLLA	9	56.41	48990859	No	No	Yes	No		8/1/2012	88.07	1	Unsatisfac	1	Unsatisfac	9	
	M	Latino	1	9TH ENGLISH LA	D	Progress Report 2	1	ZLLA	9	64.17	48990859	No	No	Yes	No		8/1/2012	85.26	1	Unsatisfac	3	Partially Pr	33	Unsatisfac
	M	Latino	1	9TH ENGLISH LA	F	Progress Report 2	1	ZLLA	9	20.41	48990859	No	No	Yes	No		8/1/2012	85.26	1	Unsatisfac	3	Partially Pr	33	Unsatisfac
	M	Latino	1	9TH ENGLISH LA	C	Progress Report 2	1	ZLLA	9		48990985	No	No	Yes	No		8/1/2012	85.26	1	Unsatisfac	3	Partially Pr	33	Unsatisfac
	M	Latino	1	9TH ENGLISH LA	P	Progress Report 2	1	ZLLA	9		48990985	No	No	Yes	No		8/1/2012	85.26	1	Unsatisfac	3	Partially Pr	33	Unsatisfac
	M	Latino	1	9TH ENGLISH LA	B	Progress Report 2	1	ZLLA	9		48990985	No	No	Yes	No		8/1/2012	85.26	1	Unsatisfac	3	Partially Pr	33	Unsatisfac
	M	Latino	1	9TH ENGLISH LA	P	Progress Report 2	1	ZLLA	9		48990985	No	No	Yes	No		8/1/2012	85.26	1	Unsatisfac	3	Partially Pr	33	Unsatisfac
	M	Latino	1	9TH ENGLISH LA	F	Progress Report 2	1	ZLLA	9	36.25	48990985	No	No	Yes	No		8/1/2012	85.26	1	Unsatisfac	3	Partially Pr	33	Unsatisfac
	M	Latino	1	9TH ENGLISH LA	A	Progress Report 2	1	ZLLA	9	99.33	48990985	No	No	Yes	No		8/1/2012	85.26	1	Unsatisfac	3	Partially Pr	33	Unsatisfac
	M	Latino	1	9TH ENGLISH LA	C	Progress Report 2	1	ZLLA	9	75.53	48990985	No	No	Yes	No		8/1/2012	85.26	1	Unsatisfac	3	Partially Pr	33	Unsatisfac
	F	Caucasian	1	9TH ENGLISH LA	F	Progress Report 2	1	ZLLA	9	37.02	48991004	No	No	Yes	No		8/1/2012	91.38	1	Unsatisfac	9	Partially Pr	35	Unsatisfac
	F	Caucasian	1	9TH ENGLISH LA	P	Progress Report 2	1	ZLLA	9		48991004	No	No	Yes	No		8/1/2012	91.38	1	Unsatisfac	9	Partially Pr	35	Unsatisfac
	F	Caucasian	1	9TH ENGLISH LA	F	Progress Report 2	1	ZLLA	9	44.96	48991004	No	No	Yes	No		8/1/2012	91.38	1	Unsatisfac	9	Partially Pr	35	Unsatisfac
	F	Caucasian	1	9TH ENGLISH LA	F	Progress Report 2	1	ZLLA	9	47.42	48991004	No	No	Yes	No		8/1/2012	91.38	1	Unsatisfac	9	Partially Pr	35	Unsatisfac
	F	Caucasian	1	9TH ENGLISH LA	P	Progress Report 2	1	ZLLA	9		48991004	No	No	Yes	No		8/1/2012	91.38	1	Unsatisfac	9	Partially Pr	35	Unsatisfac
	F	Caucasian	1	9TH ENGLISH LA	F	Progress Report 2	1	ZLLA	9	49.72	48991007	No	No	Yes	No		8/1/2012	91.38	1	Unsatisfac	9	Partially Pr	35	Unsatisfac
	F	Caucasian	1	9TH ENGLISH LA	D-	Progress Report 2	1	ZLLA	9	61.64	48991007	No	No	Yes	No		8/1/2012	91.38	1	Unsatisfac	9	Partially Pr	35	Unsatisfac
	M	Latino	1	9TH ENGLISH LA	B	Progress Report 2	1	ZLLA	9	81.17	48991007	No	No	Yes	No		8/1/2012	99.42	1	Unsatisfac	66	Partially Pr	75	Unsatisfac
	M	Latino	1	9TH ENGLISH LA	P	Progress Report 2	1	ZLLA	9	83.33	48991007	No	No	Yes	No		8/1/2012	99.42	1	Unsatisfac	66	Partially Pr	75	Unsatisfac
	M	Latino	1	9TH ENGLISH LA	C	Progress Report 2	1	ZLLA	9	75.46	48991007	No	No	Yes	No		8/1/2012	99.42	1	Unsatisfac	66	Partially Pr	75	Unsatisfac
	M	Latino	1	9TH ENGLISH LA	B	Progress Report 2	1	ZLLA	9	87.66	48991056	No	No	Yes	No		8/1/2012	99.42	1	Unsatisfac	66	Partially Pr	75	Unsatisfac
	M	Latino	1	9TH ENGLISH LA	D	Progress Report 2	1	ZLLA	9	64.17	48991056	No	No	Yes	No		8/1/2012	99.42	1	Unsatisfac	66	Partially Pr	75	Unsatisfac

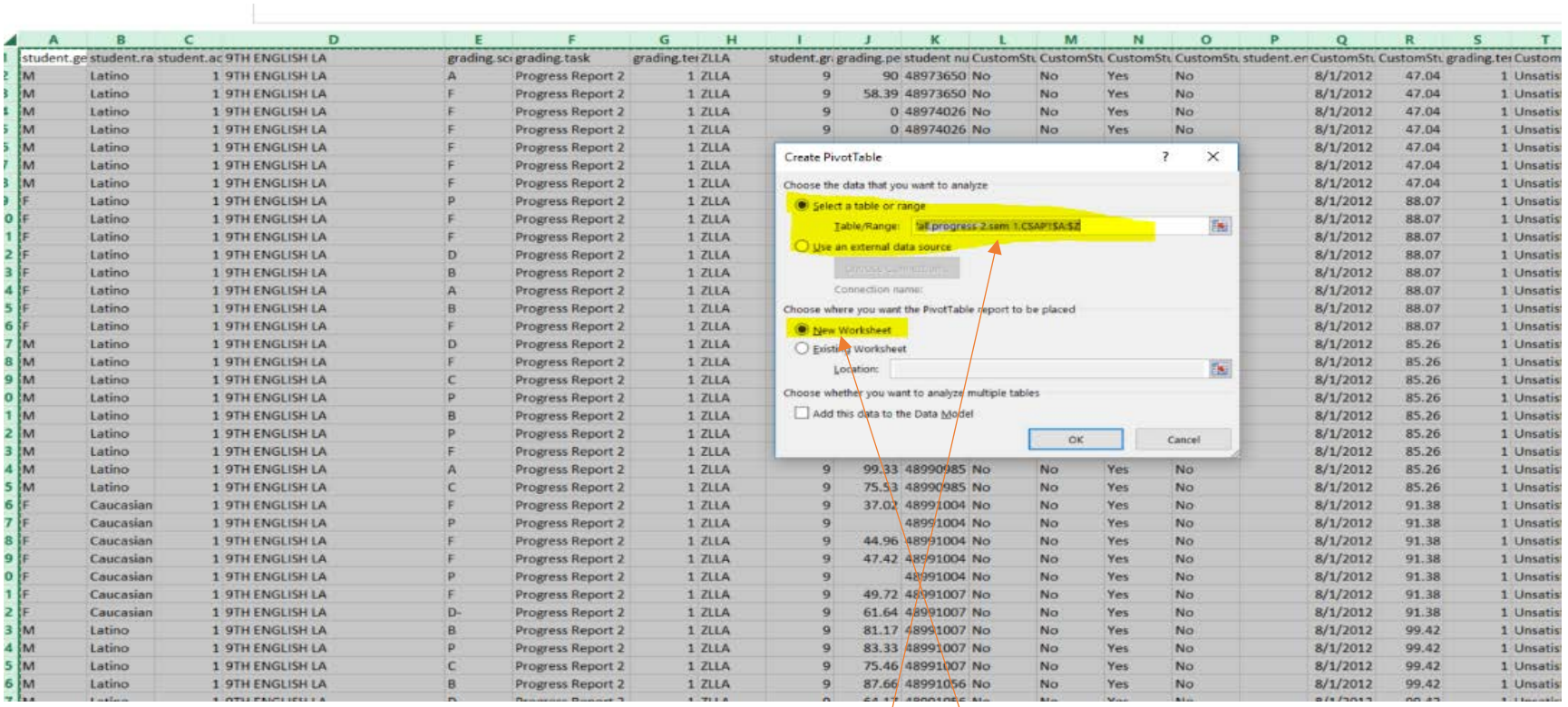
Start with a data set exported into Excel (usually as a CSV file)

How to create a pivot table (Slide 2 of 8)



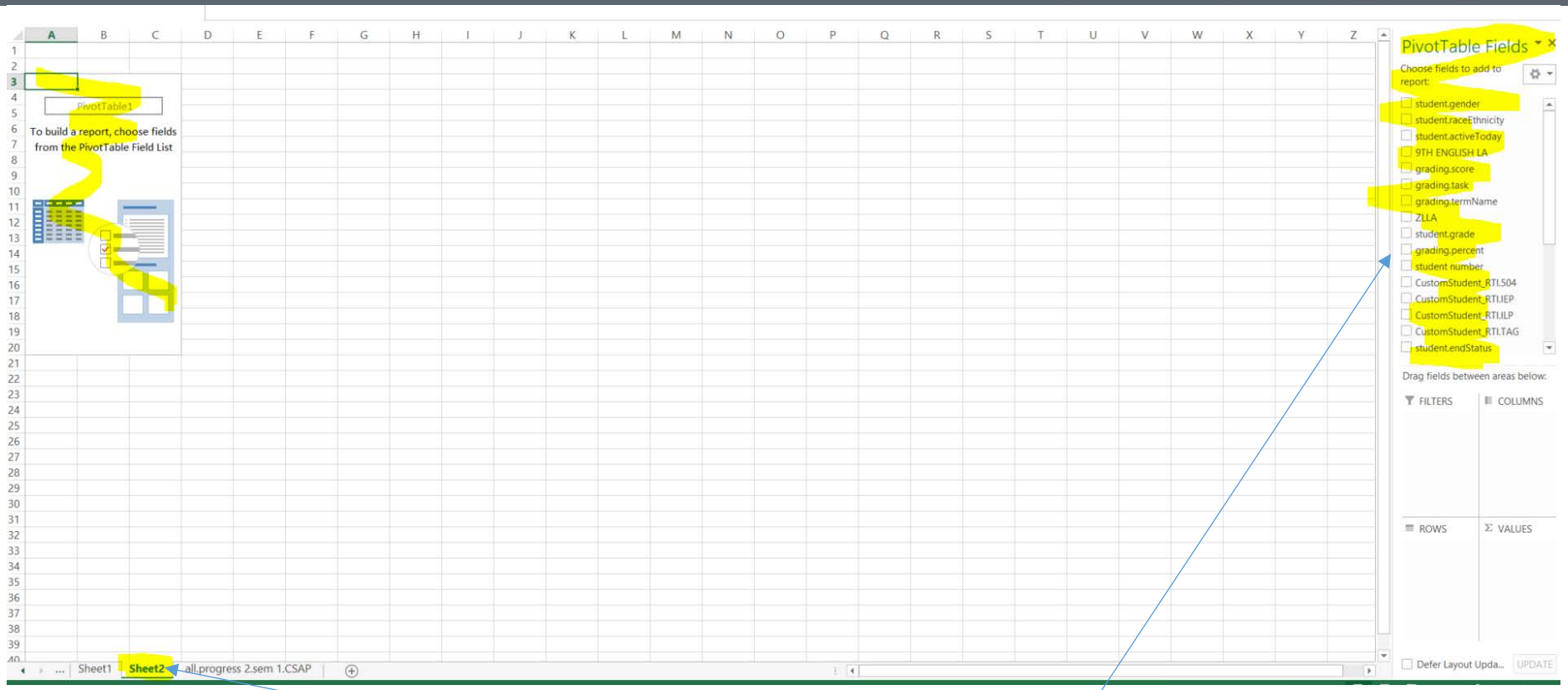
1. Go to the Insert tab
2. Select all cells in the sheet by clicking the box on the upper left corner
3. Select the Pivot Table button

How to create a pivot table (Slide 3 of 8)



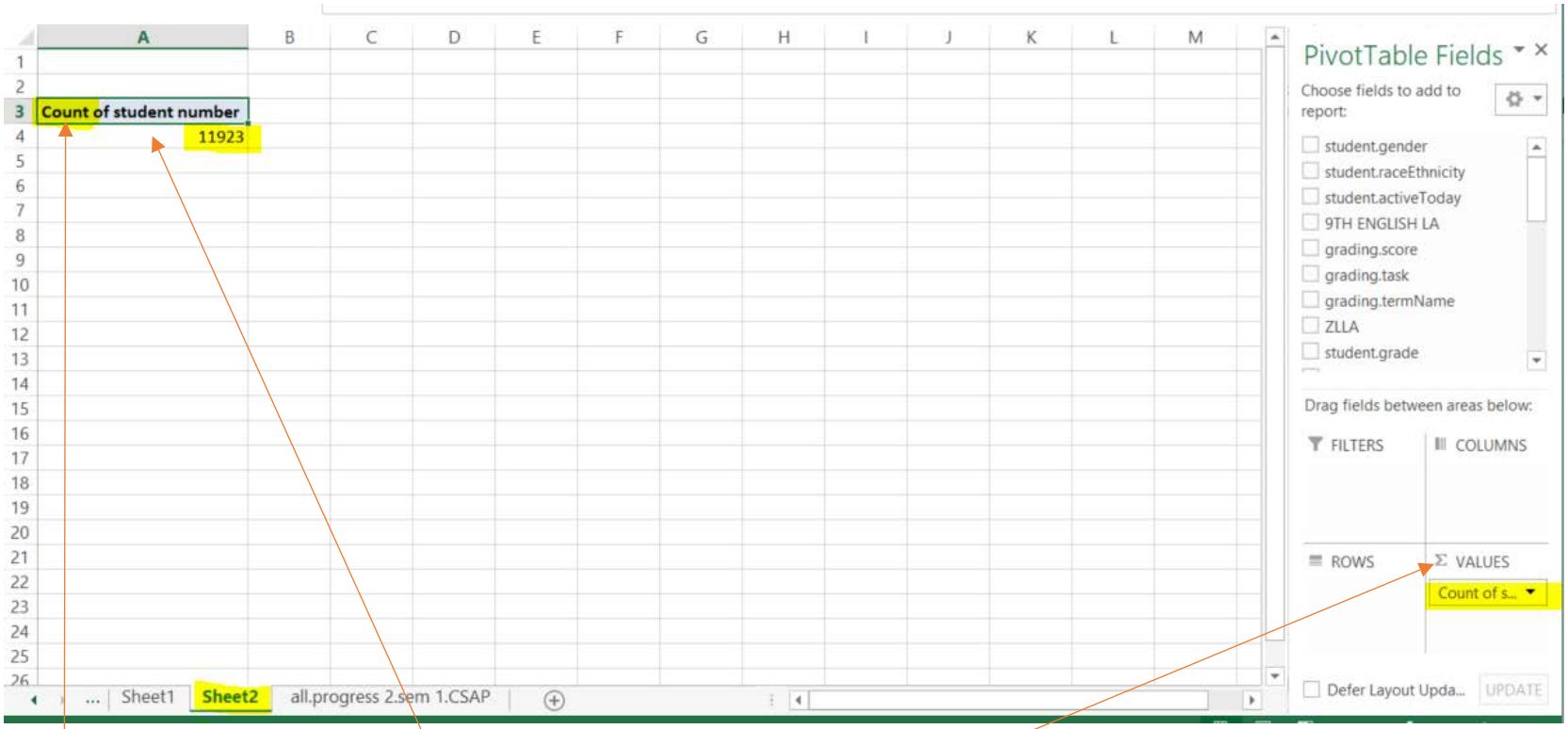
This dialog box will appear. It shows that all of the cells in the sheet are selected and that it will open the pivot table in a new sheet.

How to create a pivot table (Slide 4 of 8)



This screen will appear in a new sheet. Notice that all of the headers in your original data set now appear under “PivotTable fields.”

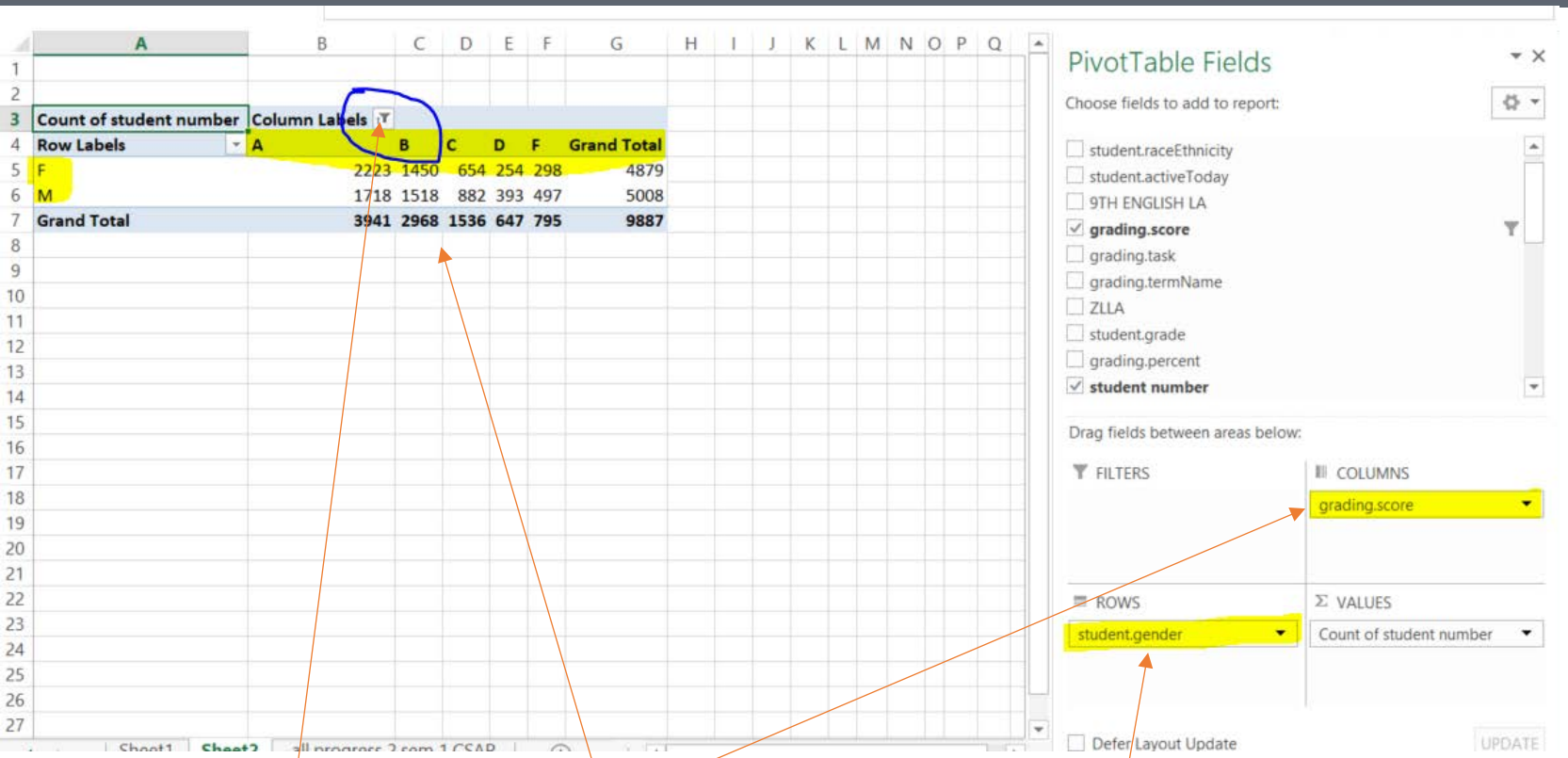
How to create a pivot table (Slide 5 of 8)



We have pulled the student number into the values field. Notice that it is the "count" of student numbers (equal to the total number of individual lines in the data set.

If this comes up with a ridiculously large number, it might be "sum" of student count. Right click on the field and change this to count.

How to create a pivot table (Slide 6 of 8)



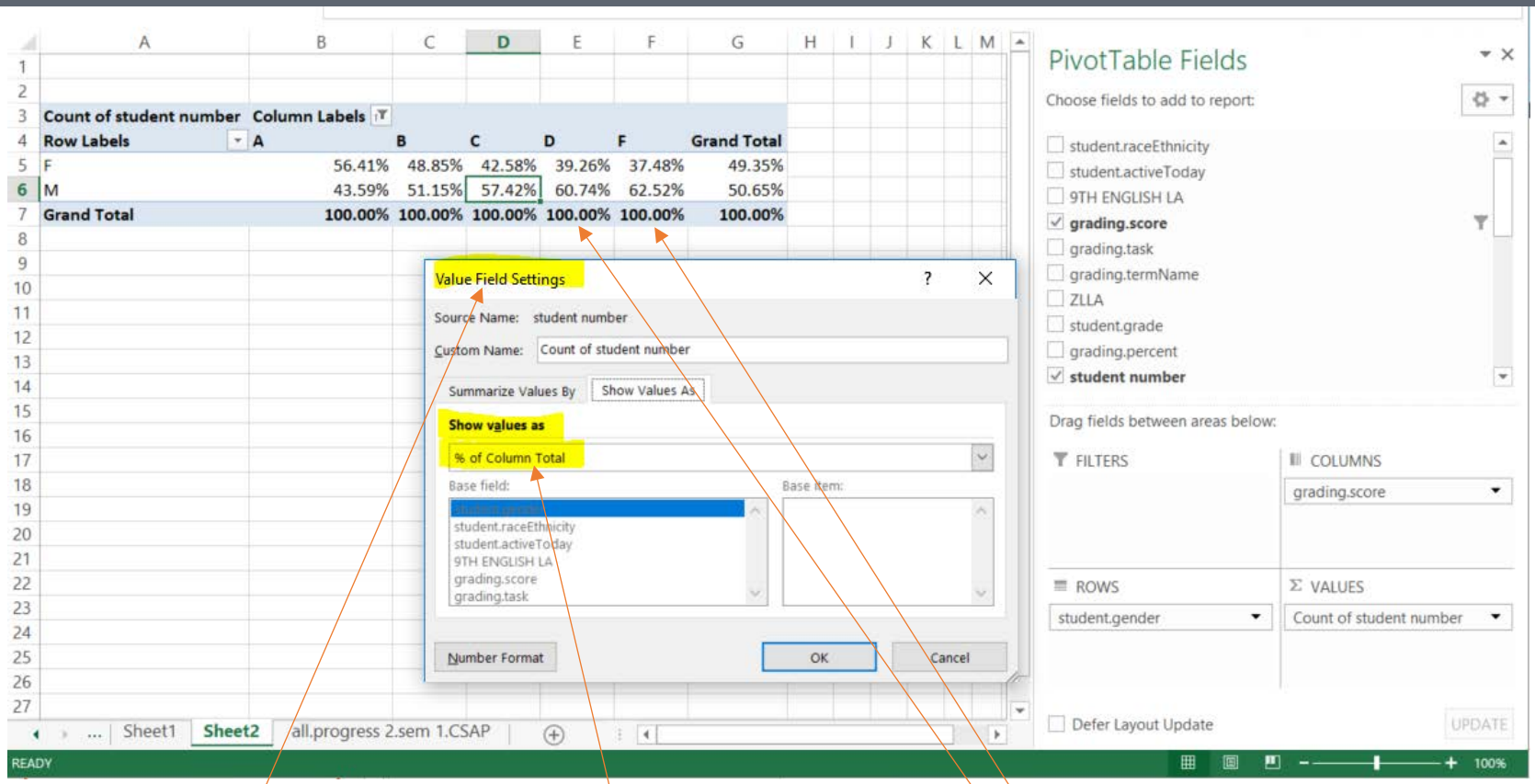
Count of student number	Column Labels					
Row Labels	A	B	C	D	F	Grand Total
F	2223	1450	654	254	298	4879
M	1718	1518	882	393	497	5008
Grand Total	3941	2968	1536	647	795	9887

Now our pivot table is coming together!

We have grading score in the “column” field and student gender in the “rows” field. This is showing the total number of individual grades by gender.

Use the filter box to select only the grades you want to display.

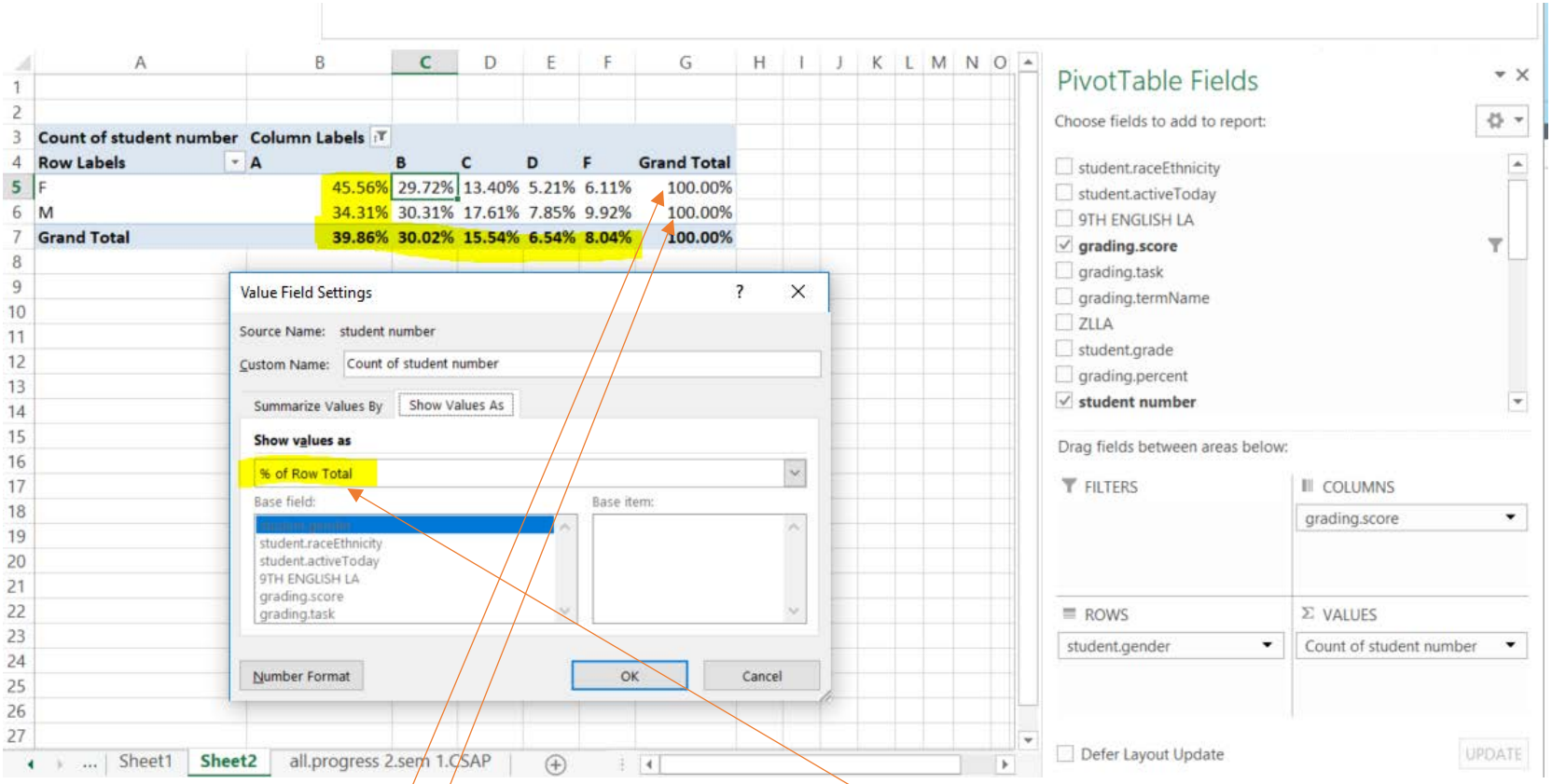
How to create a pivot table (Slide 7 of 8)



The " value field settings" dialog box is your best friend in pivot tables. Access it by right clicking over your data and selecting "field settings."

This screen shows values as "% of column." The % add up to 100% going down.

How to create a pivot table (Slide 8 of 8)



"Value field settings" again. This one shows "% of row total" where the columns add up to 100% horizontally.

Each of these setting provides new information and new ways to look at the data.

Questions you can answer using this data set and pivot tables

- How does grade distribution differ between genders, ethnic groups, course, etc?
- How do grades and standardized test scores correlate?
- What is the difference in performance between students on IEPs and those not on IEPs? 504s?
- How does attendance rate affect course performance?

AND MANY OTHERS!

Action steps to consider….

What data do I need to collect?

What data will I track?

What are my action steps and timeline?

To whom will I present this data?

Data share goal

In the chat box, please write a goal:

- By the end of this school year, (my team and) I will extract_type of_ data to create a pivot table to answer the following question: _____ I/We will acquire this data through _process__.

Have Questions, Need More Help? Contact me….

	Contact information
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