

4.11 Assessment Data Exploration Using Excel 2010 **PowerPivot**

December 9, 2011



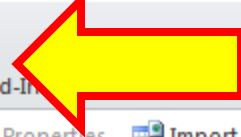
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Purpose of Session

- Demonstration of PowerPivot, a free add-in to the 2010 version of the spreadsheet application Microsoft Excel. This add-in extends the capabilities of the PivotTable data summarization and cross-tabulation feature by introducing the ability to import data from multiple sources.



File Home Insert Page Layout Formulas Data Review View Developer Add-Ins PowerPivot

Visual Basic Macros Macro Security Code Add-Ins COM Add-Ins Insert Design Mode Run Dialog Source Map Properties Import Expansion Packs Export Refresh Data XML Document Panel Modify

1	stu	traw	totper	GradeTested	Zscore	StdScore	Quartile
2	#####	3	15	HS-ALG	-1.411	35.8900304	Q1
3	#####	17	85	07	1.275564	62.7556403	Q4
4	#####	5	25	HS-GEO	-1.06396	39.3604035	Q1
5	#####	5	25	HS-ALG	-1.05574	39.4426437	Q1
6	#####	2	10	HS-GEO	-1.22414	37.7586322	Q1
7	#####	4	20	HS-ALG	-1.27689	37.2310645	Q1
8	#####	7	35	HS-GEO	-0.77049	42.2950716	Q2
9	#####	10	50	07	-0.14273	48.5726563	Q2
10	#####	7	35	HS-ALG	-0.46382	45.3617877	Q2
11	#####	7	35	HS-ALG	-0.46382	45.3617877	Q2
12	#####	6	30	HS-GEO	-0.93116	40.6883818	Q2
13	#####	2	10	HS-GEO	-1.22414	37.7586322	Q1
14	#####	8	40	07	-0.58511	44.1489161	Q2
15	#####	9	45	HS-ALG	0.096539	50.9653943	Q2
16	#####	9	45	HS-GEO	-0.31472	46.8528242	Q2
17	#####	4	20	HS-GEO	-1.14921	38.5078743	Q1
18	#####	14	70	HS-ALG	0.929896	59.298963	Q3
19	#####	12	60	HS-ALG	0.719162	57.1916238	Q3
20	#####	4	20	HS-GEO	-1.14921	38.5078743	Q1
21	#####	8	40	HS-GEO	-0.5567	44.4329527	Q2

Start with data set-
District Math
Assessment

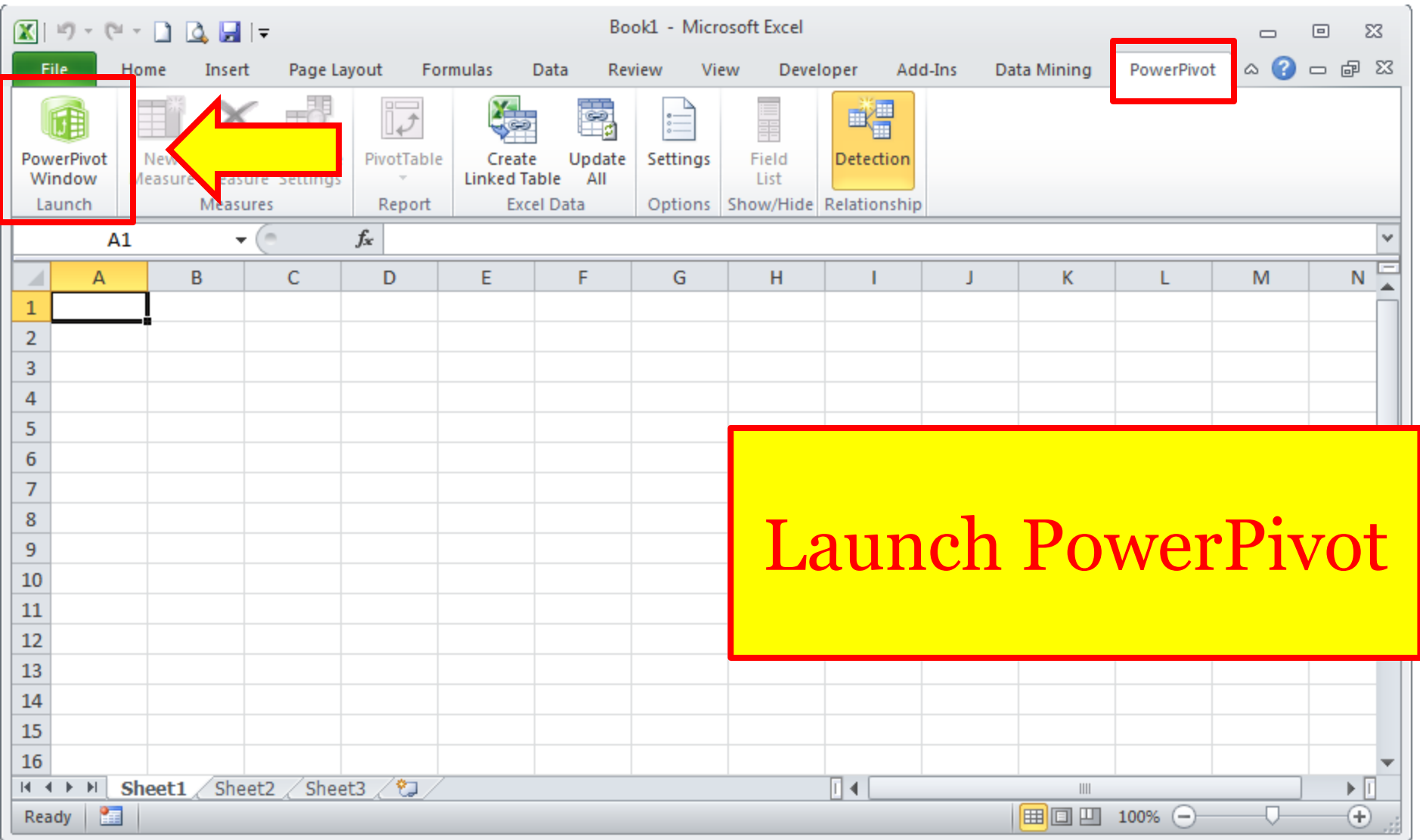


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PowerPivot Window Launch New Measure Delete Measure Measure Settings PivotTable Report Create Linked Table Update All Settings Options Show/Hide Field List Detection Relationship

	A	B	C	D	E	F	G	H
1	student	MathBookletGradeLevel	MathTestType	MathAttempted	MathScore	MathScaleScore	MathStudentLevel	MathMetStand
2	1E+06	8	MSP	TS	7	326	L1	N
3	1E+06	8	MSP	TS	12	355	L1	N
4	1E+06	8	MSP	TS	9	339	L1	N
5	1E+06	8	MSP	TS	19	385	L2	N
6	1E+06	8	MSP	TS	33	446	L4	Y
7	1E+06	8	MSP	TS				
8	1E+06	8	MSPB	TS				
9	1E+06	8	MSP	TS				
10	1E+06	8	MSP	TS				
11	1E+06	8	MSPB	TS				
12	1E+06	8	MSP	TS				
13	1E+06	8	MSP	TS				
14	1E+06	8	MSP	TS				
15	1E+06	8	MSP	TS				
16	1E+06	8	MSP	TS	24	404	L3	Y
17	1E+06	8	MSP	TS	11	350	L1	N
18	1E+06	8	MSP	TS	34	453	L4	Y
19	1E+06	8	MSP	TS	19	385	L2	N
20	1E+06	8	MSP	TS	32	440	L4	Y
21	1E+06	8	MSP	TS	34	453	L4	Y

Another data set-
State Assessment



PowerPivot for Excel - MSP-HSPEVer6.xlsx

Home Design

Paste Append Paste Replace Copy Clipboard

From Database From Report From Azure DataMarket

Table Import Wizard

Connect to a Data Source

You can either create a connection to a data source, or you can use one that already exists.

Data Feeds

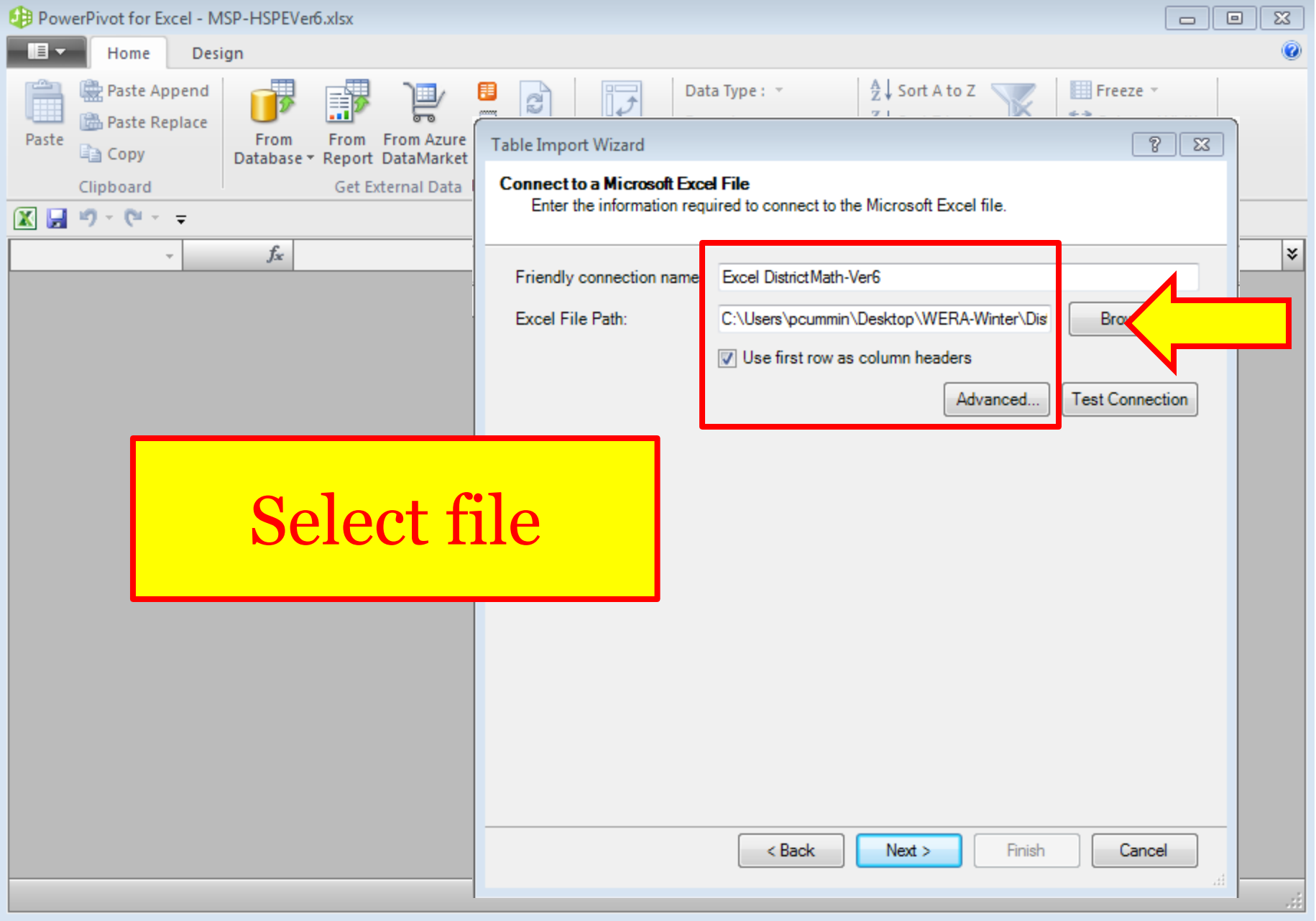
- Report**
Create a connection to a Microsoft Reporting Services Report. Import data from the feed.
- Azure DataMarket Dataset**
Create a connection to an Azure DataMarket Dataset. Import data from the dataset.
- Other Feeds**
Create a connection to a data feed. Import data from the feed.

Text Files

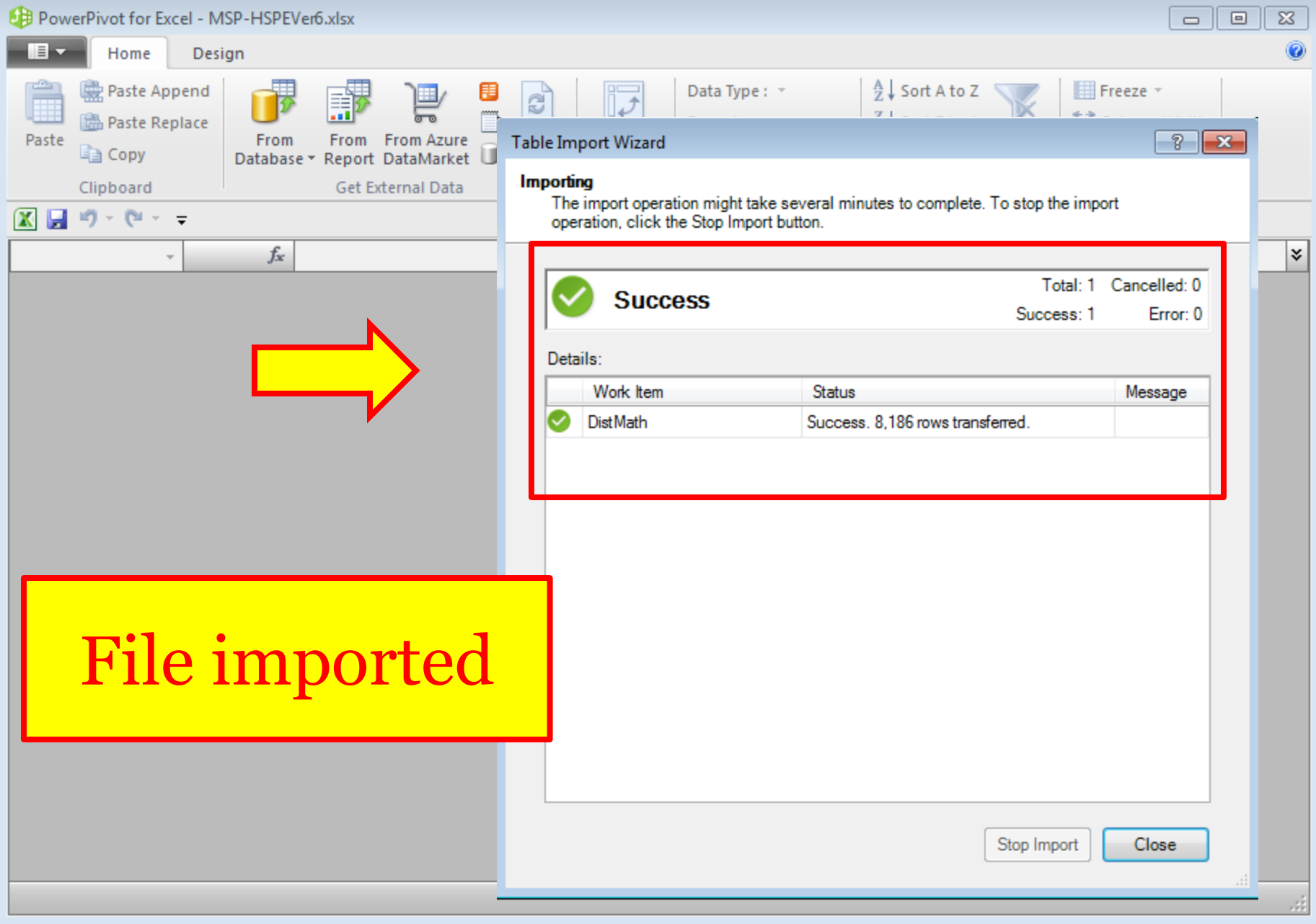
- Excel File**
Import data from an Excel file.
- Text File**
Import data from a text file.

< Back Next > Finish Cancel

Import data



Select file



File imported

PowerPivot for Excel - Book1

Home Design

Hide and Unhide Add Delete

Calculation Options

Connections

Create Relationship Relationships

Manage Relationships

Table Properties

Undo Redo

Columns Calculations Connections Relationships Properties Edit

[studentid]

studentid totraw

7 35 07

7 35 07

7 35 07

7 35 07

7 35 07

7 35 07

MSP-EOC DistMath

Record: 1 of 8,186

Create Relationship

Create a lookup relationship between two tables

Select the tables and columns you want to use to create the relationship.

Table: MSP-EOC

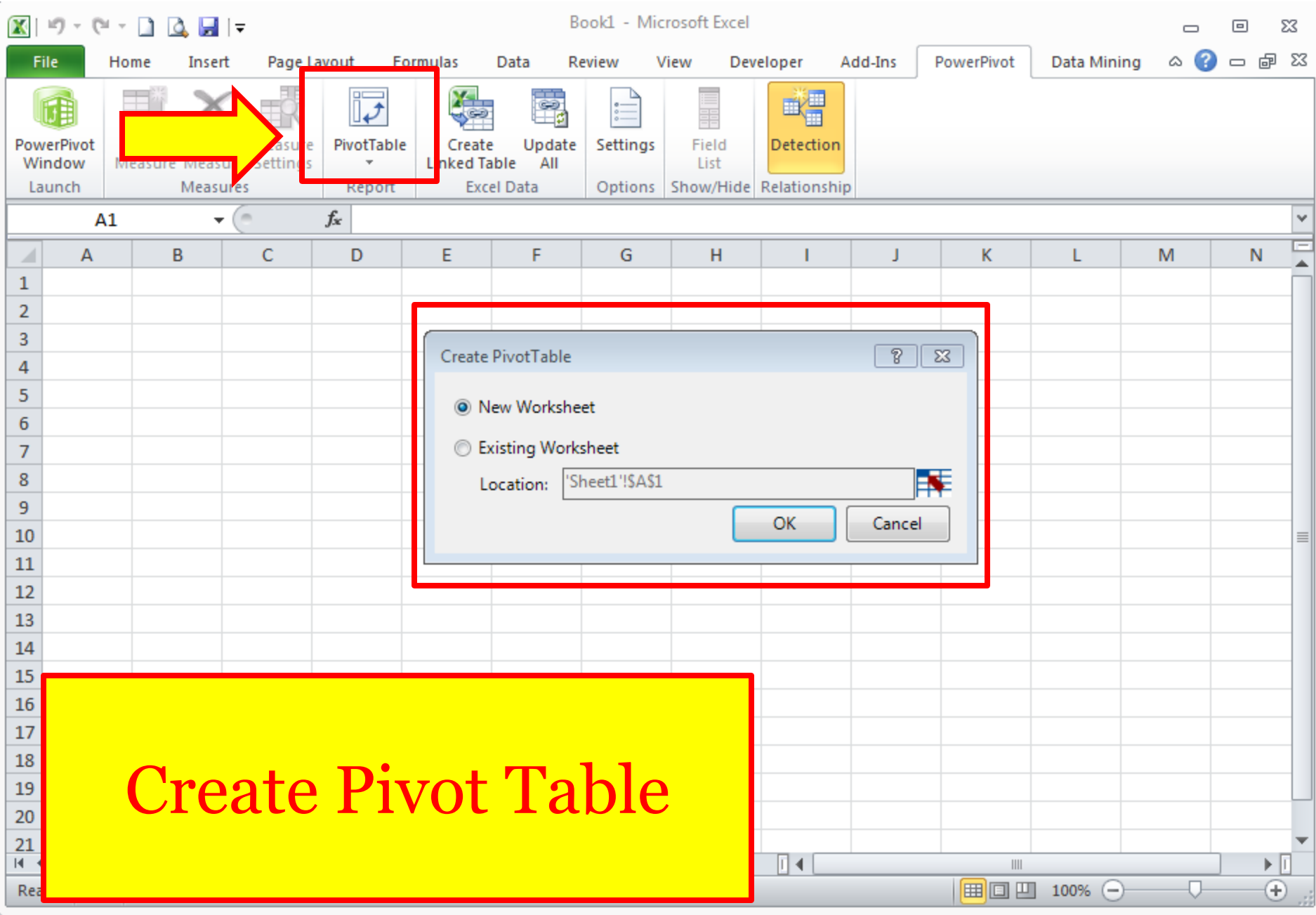
Column: studentid

Related Lookup Table: DistMath

Related Lookup Column: studentid

Create Cancel

Create Relationship matched to StudentID



Book1 - Microsoft Excel

File Home Insert Page Layout Formulas Data Review View Developer Add-Ins PowerPivot Data Mining Options Design

PowerPivot Window Launch New Measure Delete Measure Settings PivotTable Report Create Linked Table Excel Data Update All Settings Options Show/Hide Field List Detection Relationship

B3

PivotTable1

Turn on the PivotTable Field List to work with the

Both tables are linked with common ID

PowerPivot Field List

Choose fields to add to report:

Search

- DistMath
 - studentid
 - totrow
 - totper
 - GradeTested
 - Zscore
 - StdScore
 - Quartile
- MSP-EOC

Slicers Vertical Slicers Horizontal

Report Filter Column Labels

Row Labels Values

Sheet4 Sheet1 Sheet2 Sheet3

Ready 100%

Book1 - Microsoft Excel

File Home Insert Page Layout Formulas Data Review View Developer Add-Ins Data Mining PowerPivot Options Design

PowerPivot Window Launch New Measure Delete Measure Measure Settings PivotTable Report Create Linked Table Excel Data Update All Settings Options Field List Detection Show/Hide Relationship

B3 Row Labels

	A	B	C	D	E	F	G
1							
2							
3		Row Labels	Sum of totrow	Sum of totper	Sum of Zscore	Sum of StdSc	
4		1056289	3	15	-1.410996957	35.89003645	
5		1061529	17	85	1.275564034	62.75564034	
6		1068205	5	25	-1.063959648	39.36040352	
7		1069400	5	25	-1.055735627	39.44264373	
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21		1078634	12	60	0.719162376	57.19162376	

PowerPivot Field List

Choose fields to add to report:

Search

- DistMath
 - studentid
 - totrow
 - totper
 - GradeTested
 - Zscore
 - StdScore
 - Quartile
- MSP-EOC

Slicers Vertical Slicers Horizontal

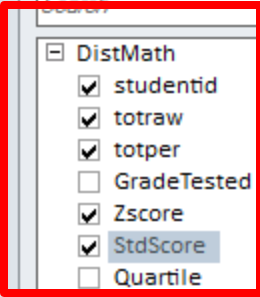
Report Filter Column Labels

Row Labels Values

studentid Sum of totrow Sum of totper Sum of Zscore Sum of StdScore

Ready Sheet4 Sheet1 Sheet2 Sheet3 100%

Pivot data from District Math Assessments



Book1 - Microsoft Excel

PivotTable Tools: Options, Design

File Home Insert Page Layout Formulas Data Review View Developer Add-Ins Data Mining PowerPivot

PowerPivot Window Launch, New Measure, Delete Measure, Measure Settings, PivotTable Report, Create Linked Table Excel Data, Update All, Settings Options, Field List Show/Hide, Detection Relationship

B3 Row Labels

	D	E	F	G	H	I
1						
2						
3	Sum of totper	Sum of Zscore	Sum of StdScore	Sum of MathScore	Sum of MathSc...	
4	15	-1.410996957	35.89003043			
5	85	1.275564034	62.75564034			
6	25	-1.063959648	39.36040352			
7	25	-1.055735627	39.44264373	9		355
8	10	-1.224126781	27.75862210			405
9						384
10						355
11						389
12						347
13						406
14						329
15						
16						
17						
18						
19	20	-1.149212575	38.50787425			
20	70	0.929896297	59.29896297	17		406
21	60	0.719162376	57.19162376	6		329

PowerPivot Field List

Choose fields to add to report:

Search

- studentid
- MathBookletGradeLevel
- MathTestType
- MathAttempted
- MathScore
- MathScaleScore
- MathStudentLevel
- MathMetStandard
- MathGroupName
- EocMathYr1TestType

Slicers Vertical, Slicers Horizontal

Report Filter, Column Labels

Row Labels: studentid

Values: Sum of totrow, Sum of totper, Sum of Zscore, Sum of StdSc...

Sheet4, Sheet1, Sheet2, Sheet3

Ready 100%

Adding data from State Assessments

