

How to Use Excel to Manage Data to Improve Teaching and Learning

Vanessa Maanao-French: So, today we're going to dig into the fun topic -- everybody likes talking about Excel on a Friday. But how to use Excel to manage your data. We're going to take things super easy, keep it simple, but give you some good tools to use in the future. And for those that haven't been on before, although I do see some very familiar names, you may recognize my voice if you've been on before. My name is Vanessa, and I work here in Seattle at the National Center on Quality Teaching and Learning. And I work with a fabulous team of folks who are also out in the field supporting Region 11 work. Very, very proud of my folks and our work. Then, the other two amazing women that I am proud to work with are Dawn and Susan, so I'll let them introduce themselves as well.

Dawn Williams: Hi, everyone, this is Dawn. I'm one of the curriculum specialists here at NCQTL, and I'm the project manager for all the webinars that we do; so, please let me know if you have any questions.

Susan Stewart: Hi, and this is Susan Stewart, and I'm a consultant for the National Center on Quality Teaching and Learning, and I'm also behind the scenes. So, if you send us a little question, you'll probably get an answer back from me, and we'd be happy to hear your questions. Or throughout the webinar, if you are needing us to go slower or faster or repeat something, just pop it right there into the questions box, and I will let Vanessa know.

Vanessa: Thank you so much. And there will be a couple of times where we'll ask if you have questions or want me to slow down. You can signal that by raising your hand, and that's not something we've done before; so, you'll see a little hand icon next to your name. So, when you feel like you've got to raise your hand, just pop onto that and we'll go, "Oh, you need something." We'll be responsive.

So, today, we will be covering some good topics for you, I think, around data entry. Really simple stuff, like I mentioned, but really, really effective stuff. Changing the size of a row or column, adding a column or row, repeating data across cells. This will be huge time savers. Filling cells with sequential data. So, you know, if you've got those Child Plus classroom numbers, we can do it in five seconds, rather than inputting one at a time. So, things like that. Ways to do formulas super quick. Literally, with the touch of a button. You'll love this. And then, finally, I'll show you how to create a graph using Excel, which I know many of you may be hungry to find out how to do, and it's actually more simple than you might think.

So, again, if you haven't already, open up that little link to get the Excel worksheet. If you decide not to use it, that's not a problem, because, I'll be demonstrating everything we do a couple of times, so you'll

get to see it in action. And then, at the conclusion of the webinar, we'll be sending out this whole PowerPoint, along with a quick and easy handout with some quick tips for you, so you can go back and do things at your leisure. Because, that's what we like to do, practice Excel on our free time. [laughs]

Dawn: Yep.

Vanessa: So, I'd like to offer you an idea that may help, because we're going to be going back and forth, between the presentation and the Excel handout. You can actually open up both and have them side by side, as one idea. So, you can see me demonstrating and practice on the other side of your screen. So, if you'd like to do that, this would be a great time to do that, if you haven't already. And I will actually go -- you'll see different screens. I want to be sure you can actually see the slide, and I didn't want it to be too small. So, you'll see me toggle between Excel and PowerPoint.

So, we're going to be doing something new, for those who have been on before. We're going to have you be really interactive, and I didn't want it to be confusing about when I talk, when you get to play on Excel, and when I'm demonstrating, so we've color-coded the slides. So, when I'm just providing information for you to have, you'll see the slides are color-coded blue. When I'm demonstrating something, you'll see that the slides are predominantly orange. And then this is when you guys get to have fun. The "let's try it" slides are green. And so, it'll be the instructions for what you can be doing on your Excel handout. So, side by side, this is where it really comes in handy. And then, finally my personal favorite: Poll questions, where we get to, kind of, take the pulse of how you guys are doing out there and gives us some information, too, about how to move forward in the presentation. So, like I said, it's my favorite; so, we'll start with one.

How would you describe your current comfort level using Excel? Beginner, novice, intermediate, or advanced? And if you are advanced, you will be leading the next webinar on Excel with me. [laughs] That's not a threat; it's an invitation. [laughs] I'll give you a couple seconds to do your voting.

Susan: All right, I'm going to close the poll and show you the results.

Vanessa: Oh, hey, where are my presenters? [laughs] Well, then this, hopefully, will be a webinar where you can get some answers to questions you may have about using Excel or also just some quick tips to make things easier for you when you are using it. Maybe, by the end we'll have some intermediate people, and then I'll coach you into being my co-presenter. [laughs] So, it's always good to start with why we want to even delve into this topic and using Excel is a wonderful tool that the more you learn to

use it, the more you love it. I've definitely gone through a love development with Excel. I wasn't quite so enamored in the beginning. But it is a tool that helps you use data to predict, manage and present your information, because you can organize it in a very clear way. You can use the tools to be able to make some calculations, like averages and find your range, that kind of a thing. But then, what I find it most useful for is then being able to make that data come alive. So, creating those charts and graphs that you can have actual conversations around, versus looking at a spreadsheet full of numbers. So, like I said, we're going to start with things, very, very simple. This is the 101 -- maybe it's even before 101 -- version of learning about how to use Excel, but it's important for us to have shared vocabulary, so, we all understand when I say workbook, worksheet, et cetera, et cetera. So, we'll start with that, workbook.

So, workbook is what you opened upon that link. And it contains worksheets. And you find the worksheets on the tabs on the very, very bottom. And so people will ask, "Well, is it a worksheet or a spreadsheet?" And actually, both. Because, spreadsheets really are any form, whether it's on paper or electronic like Excel, where you're looking and analyzing data. So, worksheets are just another form of spreadsheet. So, now you know. So, I'd love for you to do this first.

Let's try it -- see, it's in green. And if you've got that workbook handout open, just try locating the different worksheets within your workbook. And again, you find it down at the bottom, and you can just see there's different tabs with different names, and they're also different colors. And there's another little tab that you may need to use during the webinar, which is the little arrow keys to help you toggle and be able to see all of what's available. I think we have like 10 little worksheets for you to use today. So, you may need to use that at some point. I know I definitely will. So, it's good that you find that now. Some more lingo. This is the simple stuff, but it's good. So, columns. Of course, we all know what columns are. But they're labeled A, B, C, D, and on and on. And then rows are labeled 1, 2, 3, and on and on. And then cells.

When you want to name a cell, you always name the column and then the row. So, for example, G8. And now, super simple, but we're going to be using this a lot. Left click and right click. And this is a good time for me to make a small shout-out to my potential Mac users out there, who may not have a left click/right click feature on their mouse to let you all know that what I'm presenting is from a PC lens. And you may have very similar menu items, but they may be in different places; you might not be able to do things exactly the way I do it; but it's Excel, so you still can do it. And then, I'm also going to be using Microsoft Excel 2010 for my demonstrations; so those are what you'll see today, but a lot of what I'm showing also exists on earlier versions of Excel.

So, it's good for us to also think about, especially, for those folks who are very new to Excel, to learn about the magic cursor. There's one in particular I think is really, really magical. We'll talk about that one later. But it's important for you to learn that the cursor will actually change different shapes depending on where you put it on the worksheet. So, it starts off with this normal or default pointer, which helps you select which cell you want to work in. If you put your cursor at the top of a row or over a row, over the numbers on a row, you'll actually have it change to a dark arrow, and we'll use this in just a little bit. And if you click on it when it's in that shape, it will highlight that row or column. And then this one is the sizing pointer. If you place it between the dividing lines between a row or column, you will actually be able to move things around and we'll do that next.

So, when you're doing data entry, these are some things that are super helpful to make it easier for you. So, making a column wider, if you've got -- you want to be able to see an entire entry, a really long number or a really long name, or for folks that are using child assessment, maybe you want to put a descriptor of the child assessment into a cell, make it wider. Making a row taller can also be important, adding columns and rows, and then wrapping text. So, we'll walk through all of these to help your data entry easier. So, I'm going to demonstrate first how you adjust the width of a column. And when I demonstrate, first I'll show you with slides, and then I'll actually do it again on the Excel handout.

So, if you're going to get ready to do this with us -- I should tell you this first -- go ahead and find the Excel worksheet that's labeled, "Sizing Rows and Columns." And it should be a black tab. So, to adjust the width of a column, move your pointer to the top of the worksheet, and then you place it between -- for our exercise, we'll place it between column A and column B. And you'll see that it changes shape. And then, you're going to want to left click and hold and then drag your mouse to the right. And this will increase the width of column A. You can also decrease it by left clicking and holding it and taking it to the left. Super simple -- so, let me show you. And I'll let you try it, I promise. So, let me get to the right now; I want "Sizing Rows and Columns." So, I place my cursor there, until it changes shape. I click and hold, and I drag it to the right to make it wider. Same thing, left click and hold and drag it to the left to make it smaller. Just like that.

So, now I'd love for you guys to take a minute, to try it yourself, and we'll walk through the instructions. So, if you've got that open and ready to go, move your pointer to the top of the worksheet, between column A and column B. You'll see it changes shape. Left click and hold and drag it to the right to make that column wider. And then, do it again, but this time drag to the left to see that it decreases. Super helpful and super easy.

So, now I'd love it if you guys want to try doing the height, changing the height of a row. Very same process. Place the cursor between the dividing lines between -- we'll pick rows 3 and 4 -- until it changes to that new pointer. Then click and hold, and you can drag up or down to change the height of the row. And while you guys practice, I will show it to folks who may not have opened the handout. So, there I go, I left click and hold and bring it up.

Trust me, this is awesome stuff to have in your back pocket. So, there are times, though, when you are doing your data entry and you realize, "Oh, I wish I added a column for the date," or something, or for the child identification numbers. Whatever it is, you want to have a column, and you want it in a certain place. There's a quick way to be able to do that. And if you want to get the handout ready, it's that "Adding Rows and Columns," and it's purple, okay? And the way you do that is -- remember, I talked a little bit about how the cursor changes shape. Well, this time we're going to have it change shape to be the dark arrow. So, you do that by left clicking on the column letter. We're going to add a column, select it. And then, you right click, and you'll get a down -- a drop-down menu. And then you can select "Insert." It's that simple. So, and then when you do that, the new column will be added before the one you selected. So, I'll show you really quickly. So, that was already highlighted. Let me un-highlight it, just so you can see. You highlight the row, right click to get the drop-down menu, click "Insert," just like that. Super easy.

So, I'd like for you guys to get a chance to test that out for yourself. So, go ahead and try it, and I'll, kind of, walk you through it, talk you through it. So, go ahead and left click on the column letter B and select it. Right click for that down menu, and then select "Insert." And if you were successful, it'll look like that. Duh-duh-duh-duhh! [laughs] Nice. So, I'll go ahead -- let's do the same thing by adding a row, because this happens often. You realize, "Oh, I forgot to add this child, but I want it to be in alphabetical order." This is one way that you can do it. So, to add a row, same idea. You left click on the number of the row to highlight it. Right click to get that drop-down menu again, and then select "Insert." And when you do that, the row will be above, okay? And I will do the same thing as a demo. Highlight it, drop-down menu, "Insert." And there it is. Okay.

So, sometimes, you have a lot of text in a cell, and it either cuts it off -- you can't read what it says anymore -- or it goes over cells. And what you really want to do is keep all that information in one cell. So, there is a way to do that. A couple of ways, actually. Go ahead and take a look right now to see if you have a little icon that looks like the one that's circled on your screen. It might even say "Wrap Text," which is very helpful. [laughs] Sometimes, it's just a little symbol. And so, all you would need to do in that case is select the cell you want and then click on that button, and it'll do it for you. Easy, peasy.

The other option if you don't see that menu or if you just want to get -- you know, you like clicking a lot, there's another way to do it. You would still select the column or the row or the cell that you want, and then you would right click on it to get a drop-down menu, and you'll select the option that says "Format Cells." Once you're in there, it'll give you another place to click. There's lots more tabs. So, many tabs in Excel, it's amazing. But you want the tab that says "Alignment."

Once you're in there, you'll find an option to wrap text, okay? And so, I will show you how to do that, and if you want to do this with me, it'll be the red tab. I'm beginning not to be able to see. I'm going to use my little arrow to get more of my tabs. So, "Wrapping Text." So, I'm going to click just on this cell, and I want it to wrap. So, I'll do it the first way, which is to find that quick and easy button, which looks like this. There it is -- nice and easy. Or, I click on the cell, right click, find my "Format Cells" option, open that. It wants to be a little bit slow for me, but that's all right, we'll wait. There it goes. Click "Alignment," and then we're going to wrap text. And done. See, easy, easy. And this comes in handy quite a bit. And you can still always adjust the size of your row, adjust the size of your -- of your row and your column, duh-duh-duh! So, feel free to play on this worksheet.

So, I've done that for you, and as a reminder, this is just what I just did about selecting my row or column, finding the cell I want, aligning, and wrapping. But this is my all-time favorite cursor of all time. This one will save you, literally, hours of time, when you're doing data entry. I hope you will come to love it, as I do. So, I'm calling it the fill corner cursor, because you find it on the corner and it fills in things for you. But to find it, you select the cell you want, okay, and then if you move your pointer to the bottom right corner, it'll change shape. So, it'll look just like this little cross. And what you can do with it is pretty fun.

So, I'm going to be demonstrating, and you can get ready with the blue tab labeled "Repeating Data," but I'll show you what it can do. So, let's say, for instance, we were going to type the letter A, in the first cell, in cell A1. I would put my pointer in the bottom right corner, and I would click and hold and then drag the mouse down. And as I do this I will just keep getting the letter A, over and over and over again, until I stop dragging my mouse. So, let me show you that, actually, before I let you try it, because, I want to be able to show folks a couple of times, before they do it.

So, again, I have my cell there; I get my pointer to change shape and then, I just keep dragging it down. Letter A's all day long. So, go ahead and give that a try. Type the letter A if it's not already in your worksheet. You can type whatever you want, actually, if you want a series of numbers. Then, move your pointer to the bottom right-hand corner. Left click, hold, and drag and pull the mouse down and see how many A's you can make instantly. And since you're already there, you can go ahead and try repeating data across columns.

So, go back up to that first cell, get your pointer in the bottom right corner to get the magic cursor, and then left click and drag your mouse to the right, and you will get the letter A forever, or at least until you stop dragging. So, that's what it'll look like. Ta-da! Love it. Love it, love it. But that's not how a lot of data in Head Start works. We don't get a lot of repeating data, so it's important to know how to repeat sequential data. And there can be things like months of the year, days of the week, years, and numbers that are sequential.

So, there's a quick way to do that, as well, using that same magic cursor. So, the demonstration will be used -- will be using the orange tab and the blue tab, which are labeled "Months" and "Days." And I'll show you "Months." So, you can type in the first -- the name of the first month you want and then, move your pointer to get the magic cursor in the corner. And then again, just like we just did with the letter A, you just click, drag, and you can move it to the right to fill in a row, or you can drag it and fill in a column. And I'll show you what that looks like really quickly. So, there's January, like I just said. And I'm going to get that magic cursor, and I'll drag it over this way to get the months sequentially across this way. Or, I can drag down to get the months going down this way.

Dawn: Hey, Vanessa?

Vanessa: Yeah?

Dawn: We do have a question out there, and so Terry -- Terry, let's go ahead, I'm going to un-mute you, and I see that you have your hand raised. Could you ask your question, please? Hopefully, we can hear you.

Vanessa: Hi, Terry; I'm listening.

Dawn: And if we're not picking you up through this way -- we're chatting with you -- you might see in the chat box we've sent you a message, and we could answer your question that way, too. But, I see you have your hand raised, so we want to respond to you.

Vanessa: Yeah. Yeah, thanks. Yeah, Terry, definitely shoot us a question. Yeah, because, I want to be sure you get what you want out of this webinar. So, I'm sure Dawn will pause me again, if we can answer your question. So, let me actually stay there, because I remember yesterday I shared this trick, so, it'd be not okay if I didn't share it with you guys, too.

So, we did show you one way to expand columns earlier, and you're noticing that you can't quite see all of February, and March is cut off. You can either do it the way I showed you this morning -- or, this morning -- just a few minutes ago, where you click and drag and pull it out to make sure it fits. The other way to do it, which is super quick, is you still go up to the top and you get that sizing cursor, but if you double click on it, it automatically sizes to fit what's in there. And what that means is that months like May will be a little bit narrower. Months like February will be a little bit wider. But it is a quick trick, if you want to get things to be adjusted size-wise.

So, I'm going to have you guys try doing the same thing I did, but go ahead and use days of the week instead of months of the year. So, click on cell A1, which I think has Monday in it. Put your pointer in the bottom right-hand corner to get that magic cursor and then left click and drag to the right to fill in a row. And then, try also left clicking, dragging and holding to fill in the column. And, I'll put this up here, too, so you can see how you did.

So, there I am, got that cursor, dragging it over. Give myself a full week, get all the way to Sunday. And same thing, dragging it down rows, and there we go -- just like that. All right. I'm going to keep moving. So, the question, though, is: Does it work the same way with numbers? And unfortunately, it doesn't work quite the same way with numbers. You have to do a little bit of some extra work, but not too bad. What you'll need to do -- oh.

Susan: I'm sorry; this is Susan.

Vanessa: Yeah.

Susan: We have a question. Somebody's tabs are not showing, and she's asking how to make them show. She just keeps seeing rows infinitely.

Vanessa: Oh, wow. That's a good question. My -- I'm wondering -- sometimes, if you open -- well, I don't -- if you open, sometimes, an online Excel in something like, I think it's Internet Explorer, it doesn't let you see tabs. But opening it in something like Firefox or Chrome works better to see tabs, but I'm not sure. I'm so sad about that, though.

Dawn: I think she's talking about her Excel workbook. So, making sure your screen is maximized, because, sometimes, if you open up the Excel document and it's not maximized, it might be floating in a larger window.

Vanessa: Oh, right.

Dawn: You might have to move it a bit. So, in the upper left-hand corner, there's X to close it, the middle one that allows you to minimize or maximize the screen. So, make sure it's maximized, and then, hopefully, you should see you should see your sheets show up down at the bottom.

Vanessa: I hope that works. Oh, goodness. If it doesn't, though, I guess I'll try to go a little bit slower on the demo pieces, so you can follow along that way. And then I'm hoping you'll be able to see all of the worksheet tabs, though, to be able to practice again later. So, we'll work with you to figure that out. So, sequential numbers work best, if you are able to -- well, if the numbers really are sequential. So, in our example, we're using 3456. The next number would be 3457, et cetera, et cetera. If you type in, at least, the first two numbers in the sequence, then you can left click and highlight those two cells, and then the click and drag thing works again, which is really, really awesome. Because, then, you can fill in rows or columns really quickly with data.

And so, let me show you, especially, for my friend who can't see this on her own sheet -- I'm so sad. I'm actually going to erase these two, not that you need to, but you can do it with just two numbers. So, I'm going to highlight or select this one by left clicking on it and then dragging to select both of those. And it's okay that this one is not highlighted, the first number. You know what's highlighted by looking over here at the row. You'll see that 1 and 2 are yellow now, and so is the letter A. So, that tells me these things are what's highlighted in those areas. I get that magic cursor; I left click and hold and drag down. Fills in just beautifully. And same thing here. If I started my row and I realized later: "Oh, yeah, I can use that magic cursor thing;" it's never too late to do it. So, you can -- even if I had four numbers already going, same thing. Highlight what I've started, get the magic cursor, hold and drag, and there you go: Duh-duh-duh-duh. Huge time saver. I used to be the person who would write the numbers: 1, 2, 3, 4, 5. Not anymore. Not anymore. You don't need to do that. So, there is that.

So, go ahead and try it out. Get into the cell you want, which is A1. Left click and drag to highlight two of the cells. You can decide which order you want to go. You can either go columns or rows. Release that left click button, move your pointer to that bottom right corner to get the magic pointer, as I love to call it, magic cursor. Left click, hold, and drag, either to the right or down to fill in a column or a row. Okay. So, we've done our data entry. That was really quick.

But I have some really important words of advice. Before you go any further and you finish your data entry, it's always good to create a copy of it. I have made the mistake too often of working with my raw data and not saving it or making a copy, and then, actually not being sure that I had intact data, because I deleted things, made some changes, and then didn't save it. So, let me just -- word of advice: Make a copy. So, I will demonstrate with these -- with the slides and then, on the actual Excel sheet how to create a copy of a worksheet, and then, also, how to rename it. That's also very important.

So, to create a copy, you would just click on the tab on the bottom. If you right click on it, you will actually get another menu that allows you to "Move or Copy"; it's one of the options for you. And then, within that, once you've clicked that, you would select, "Create a Copy. Awesome. Super easy. Just click, click, click. And then, it gives you the option to move that new copy anywhere you want. You can put it in a different workbook, if you've got more than one open; but more often than not, you are just adding it to within your current workbook. And, so, you can add it, before any of the ones that are currently listed within your workbook or just put it at the end. And that's typically what we do; I will do that for you as a quick demo. And then, I'll show you how to rename it.

So, we'll just make a quick copy of -- let's just make a copy of "Sequential Data." Why not? So, I would right click on that to get the menu, move up to "Move or Copy." Going to select "Create a Copy," and then, here you just scroll down a little bit to get to "move to end," because that's where I want to put it. Click "OK," and now it's there. So, I'll talk a little bit now about renaming, because, we don't want it be named "Sequential Numbers Number 2."

So, to do that, it's almost the same process. You would right click to get a menu, select "Rename" this time, and then you're able to type in your new name. And you can see, too, that another option on there is to change the tab color, just a few down under "Protect Sheet," and that's how I made all of my tabs different colors, which is also very helpful. So, let me go ahead and rename "Sequential." And I'm not feeling very creative, so I'm just going to call it "Copy." And there it is, done and done. So, now my copy is there, but I still have the original "Sequential Numbers" over here, okay?

Next, poll question time, yay! Just curious for you guys all out there, who has been successful using formulas in Excel? True or false?

Susan: Well, you're again very quick finding your way back to the GoToMeeting space, and I see almost 50 percent of you have answered. Interesting results that we're getting. Another five or six seconds for those of you who have not found your way back and then I will share the poll. Going to close it now and share those results.

Vanessa: Oh, wow, okay. So, we have more success today than yesterday. That's good to know. And for others that haven't had success yet, that's okay. I'm going to show you the quick way to do it. I used to do the longhand version, writing the formulas into cells and finding the num -- okay, there's a much easier way to do it. And it's with what I call the lightning fast AutoSum key. So, if I could use "magic" for more than one, I would, but this is just lightning fast. So, you actually have this key as an option within Excel. It may be in a different place than I may show you, but look hard for it, because it'll be worth it. It'll help you do a number of calculations, including finding a sum, an average, and the number of entries. But we'll go through that in a little bit more detail in a second.

So, the "let's try it" is super quick. Try to find that button, if you have it. If you are on Excel, or Microsoft 2010 version of Excel, just be sure you're on the Home tab, because that will give you the right menu to find it. You might also find it in Formulas, but this is the way to find it easier, Home. And then, you find the AutoSum key. It looks just like this. And then, you should have a little down arrow that gives you a menu and within that menu, you'll see Sum, which is pretty self-explanatory. Gives you the total of all the cells in a row or column. The Average gives you the total divided by the number of entries. Very important for people who want to be able to show their data for Head Start.

I love Count Numbers. I think it's not used enough. This helps you to make sure -- it helps me make sure, anyway -- that I am consistent with my data entry; I'm not missing data. It helps you compare -- say you have 18 in one class and 19 in another, that you can really know that you've done all your data entry correctly. The Max, of course, the highest value, and the Minimum, the lowest value. That's pretty simple. But together, what's great is it gives you the range.

So, when you're thinking about and you're analyzing your data, you're not thinking just about averages. So, we don't lose kids in our thinking, the kids that are excelling and who need more challenge, and those kids who are struggling and really need us. Too often, important information is lost in averages, so, this is really good information to have. So, I'll demonstrate the use of the AutoSum key, and then we'll do a practice with it. So, it really is as much just point and click. It's so great. It's like using one of

those really easy cameras. You know, point and click. I want my total, here, point. And then, I'll go to my AutoSum key, get the drop-down menu, and select, "Sum," hit "Enter," and when you do that, the first thing you'll see is that the formula automatically gets embedded in that cell, which is great. And it also highlights the data that you're putting into your -- the sum in this instance. You just hit "Enter," and there it is, ta-da! Easy. Easy, easy.

So, I'd love for you guys to try this now, too, if you've got your workbooks open. Select -- you're going to want to find the cell that you want to put it in. We want to have it in B5, so -- this might be B6. Let me think about this. Anyways, you know where it's supposed to go. Select the AutoSum button and get that -- the Sum. There you go. And then you'll see that the formula appears and then click "Enter." Easy, easy. Easy, easy.

So, now, showing you the average. And then we'll demonstrate. Actually, let me just go ahead and demonstrate the sum first, because I didn't do that yet. Sum and average. Click where I want it, which is B6. AutoSum button, "Sum," got it, done and done. Okay, now I can move on. [laughs]

The average. We definitely want averages. Okay, so you want to select the cell where you want it to appear, just like we did with the sum. This time we're going to click "Average." I know this feels very intuitive now. And then, it'll do the same thing. It'll have a formula in there for you, and then it'll highlight your information in the cells you want, but there we have an error, okay? So, this is important for you to see and to practice with, if you create your data this way, if you want to have your data stacked like this. Because, right now, our total, that we just calculated, is included in our data that's going to be selected to create the average, which, of course, would make our data incorrect.

So, the easy and quick solution is just to change what's highlighted, and you can do that by changing, in this case, B5 to B4. So, let me show you that really quickly, and then I'll have you do it as well. I want the average here. I'm going to go to my AutoSum, select "Average." I see that I have a problem here, so, I'm going to make B6, actually into B5 and you'll see how it highlights differently now. Now, it's only including what I want. So, I click "Enter," and now I have the true average, which is 5. So, press "Enter." Yes, I know you guys can press "Enter." [laughs]

So, I want to show you now how to do the rest of them really quickly. Because, you'll have more time to practice this on your own and there's a couple more things I want to show you before we leave, today. So, I'll go again; Total Count, go to Count Numbers; there it is. So, I've got to correct it. Got to correct it! To B5, same thing here. I want the minimum. And I'm going to correct it to be just to B5. Thanks, for hanging with me, while I do my data entry. I normally do talk to myself when I do my data entry, just so you know. [laughs] And the last one -- there it is. So, now I have all my data entered and calculated for my first column, which is good news, and that was super easy. So, we need to go back to my favorite magic cursor button, because, this is where you save -- this is really where you save hours and hours of time. Because, now you have the ability to repeat formulas across rows and columns, and this will change your life. It changed mine; [laughs] so, it's -- it's a great tip, and I'll show it to you now, since we've already completed this data here. Simple.

You put your -- select what you want, the cell I want, which in this case for us is B6. I get my magic cursor by going to the bottom right, I click and hold, and I drag over. And so, now I have the totals for all of those. I'm realizing I don't have any data in these. [laughs] But what's cool is it'll automatically calculate whatever I put in there into the totals. Isn't that cool? So, even if you had to go back and change something, it'll change it for you in everything that you've calculated, in these formulas below. But this is what I really wanted to show you. So, what if I want the average for all of my columns? Same thing. Get to the corner, drag and pull, there it is. And then total count, drag and pull. The minimum, drag it over. And the maximum. Just like that.

And we're only using four rows of data, but we know -- none of us have the luxury of only working with four rows and four columns of data. And many of you have multiple classrooms, and so, this will come in -- just be so handy for you to be able to do these calculations super fast. So, that's that one, my favorite of all time. And I just demonstrated this for you, so when you get your PowerPoint, this will be a nice reminder of what I showed you on the live Excel sheet.

So, I'm going to scroll through these fairly quickly, since you'll have them and get to talking about selecting -- or creating, really, charts. And in our work in Head Start, we typically use the same three over and over again. But that's good, because they're visually very effective. So, the first one we tend to use is a column chart, which shows comparison between data points. And in this example, we're looking at average attendance over years. That's one example. We use pie charts to show parts of a whole.

So, in this one, you know, how many four-year olds do we serve versus three-year olds? Good information to have. Pie chart is great for showing that. And then, we can use line graphs, too, to show change over time. So, on this example, a child's weight gain over the course of the year. So, demonstration. I'll be using the Excel worksheet the "Graph CLASS," the pink tab, to be able to demonstrate how to create a graph. Super easy. So, what we want to do is we want to select the data that we want to have our graph represent.

So, I'll start in A1, since that's where my data starts. I left click and drag, until everything I want in my graph is highlighted. If I find my "Insert" button, at the top of my toolbar, and there's something called "Charts." So, well labeled. And in this case, we're going to create a column graph. Excuse me. So, we'll click "Columns" and then, select a two-dimensional column. And we can also move it around and stuff, but I'll show you that on the live version of the Excel spreadsheet. And let me show you. And again, you'll have my notes and the PowerPoint to be able to walk through this at your own pace, because I do realize I'm going a bit quickly. But again, my notes will help you to do this on your own. So, I'm going to go up to A1, I'm going to left click and hold, and then I'm going to drag over, until I get all of the column I want and all the rows I want. I'm going to let it go. I'm going to find my tab at the top which says "Insert," which is here. And then it gives me options for charts. For some of you, you may have to click a button that says "Charts" first, to get this, these options, or it might be right there for you like it is for me. I want to do a 2-D column, and, you know, feel free. You've got so many options here. You can make a cone, a pyramid, make it 3-D.

I'm going to keep it simple; so, I'll go with a 2-D column, and there it is, just like that. Once, it's here, you can do -- you can copy it and put it into a PowerPoint; you can -- actually, you can manipulate it even more and add more data points to it, but that might be more for a 201 version of this. But, at least, right now, what you have is a chart that you can use and share with others. If I want to move this chart, though, say I want it to be really big or I want to print it out; it's easier to print out, if it's its own separate tab within your workbook.

So, to do that, you left click -- oh, sorry, excuse me, right click. It's always important to know left from right. And you'll get a menu, and I can just select "Move Chart." I'm going to select that, and you can make it into a new sheet, which I will do, and now you can name it whatever you want. So, I'm just going to label it "CLASS Data and click "OK," and now it's there. And it exists separate from my CLASS raw data, which is here. Just like that.

There are other really exciting things you can do with Excel that I'd love to have us think about doing as another webinar; so, I'll talk to you guys about that in a little bit; but before we go, I want to be sure to let you know that this isn't the only way to learn about Excel and that you'll get these resources at the end. You'll have the PowerPoint and a handout.

But going online, there's some great things online, and here's a couple of them that I found, when I was doing a little research myself. If you go on YouTube, if you're a YouTube fan out there; if you just type in "Excel Tutorial," you will get more than you can handle. But I've also found on YouTube, or any of those search engines, you can be pretty specific about what you want. Say you want to learn just about how to create a pie chart on Excel; it'll walk you through just that. And it's always good to talk to your IT department. Depending on the size of your organization, you may actually have free Microsoft training available to you. So, that's always worth just asking that question.

So, we have three last little questions for you, before we end, and the first is a true/false question. We want to know if this was a good way to learn information about how to use Excel. And trust me, my feelings will not be hurt. I told the group yesterday the same thing. It's not about me. It's about you. Does this work for you?

Dawn: Yeah, we're really wondering about the format. Like, does the webinar format work for you? This was the way that we delivered it, and there's not that many options there, but that's what we want to know, like is it a helpful format for you to learn on.

Susan: And if you have some comments about what worked about it, or what was challenging about it, go ahead and put those in the questions box, and we'll be able to gather that information and use that to inform how we do future webinars that have to do with this kind of thing. And so, I see that nearly half of you have completed the poll. So, just another few seconds or so for those of you who haven't had a chance and need to navigate back to the main screen. Okey-doke, I'm going to close that poll and share the results. Wow, look at that.

Vanessa: That's awesome. Well, that's good for us to know. We had a same result yesterday, as well with our friends that were on with us, so, that's good to know. That's really good to know. Thank you. Good information.

So, our next one is -- well, the first question was about format, but, now it's getting a little bit more personal. Did you learn something that you can apply in your use of Excel today?

Susan: Okay, I'm going to close the poll and share those results.

Vanessa: Okay, I think that's similar to yesterday. Okay, good to know. Okay, we've got some people who are learning stuff, which is awesome, even though this was kind of the simple 101 version. We do have some thoughts about doing a 201 version, which gets kind of fancy. [laughs] And then our final question really is: Would you come back for that 201 version? Would you come back? [laughs]

Susan: And while we're waiting for folks to finish that, we've got some feedback that it was really helpful to see the demonstration, then have the opportunity for practice. Much better than seeing it and trying to take down notes. Thank you, someone says. Another one says just a little bit too fast. Needed a little more time practicing charts. That's helpful information. Those very specific pieces of feedback are very useful to us in our planning. And so, I'm going to close the poll and see what the results are.

Vanessa: Oh, good. That's good to hear. That's great to hear. And as Susan said: We really do take what you tell us to heart; so, the next one will be slower, build in a little bit more time for practice. Absolutely. And we'll keep in that element of being able to be hands-on with it. It sounds like that was really helpful. So, we are really there.

For those who have been with us before, you know I always leave you with a quote. And this is a beautiful photo of a teacher up at Cook Inlet in Alaska with her kids. And to share just her with you, that's an almost -- that's actually enough, just showing her with her kids. But the quote is, "The wider the range of possibilities we offer to children the more intense will be their motivations and the richer their experiences." So, just take that thought with you as you move into your weekend. And stay energized in your work. And I know many of you are greeting kids soon, if they're not already back. They're coming; they're coming! So, keep this quote in mind, as we get ready to be deeply in our work that we love so much. Thank you all for being with us.