

HPS TECH TIMES



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Happy Mother's Day!

T4: Tomorrow's Technology/ Today's Teachers Wins Award

The State Association of School Boards recently announced the winners of its Education Excellence Awards for the 2002-2003 school year and Howell Public Schools walked away with three of the top awards. T4: Tomorrow's Technology/Today's Teachers, the four-day technology integration program developed by Carole Colburn and Elson Liu was recognized as one of the top three programs in Technology Integration in the state. The top three winners will now be re-judged by a set of independent judges and one will be named "Michigan's Best" in the fall.

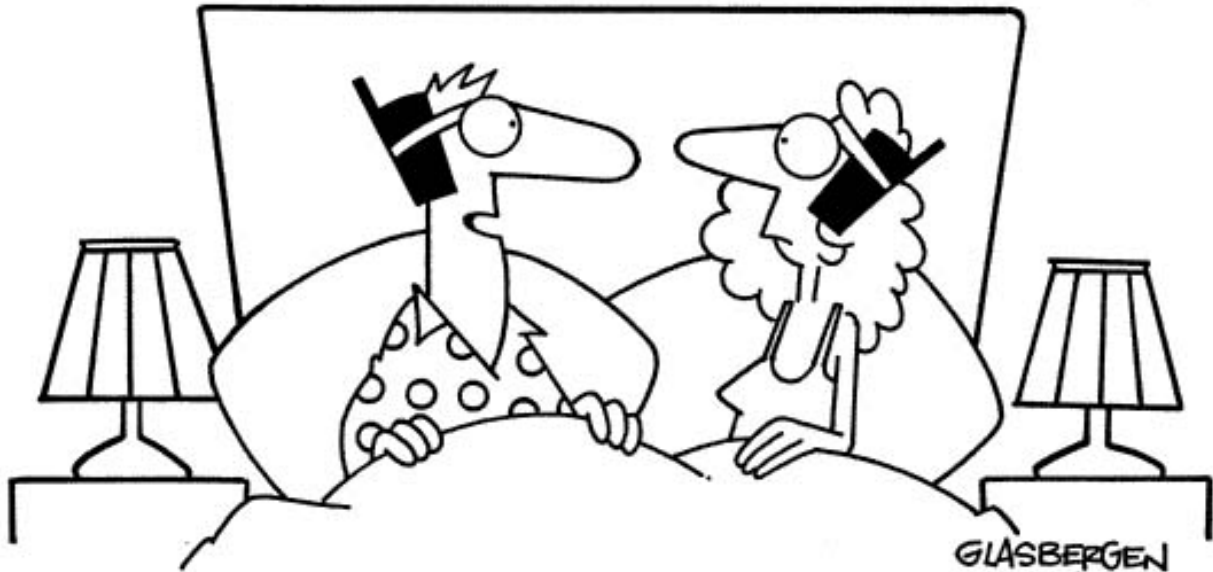
Music and Motion, a music and physical education program, developed by Christine Schoendorff and Dan Holmes of Voyager elementary and Parents 4 Kids, developed by Marybeth Roose of Community Education were also honored with awards in their respective categories.

The awards were presented at a Regional Meeting of the Association of School Boards, hosted by Leslie Public Schools at the Manor House Restaurant in Jackson, Michigan on April 17th. Here is a picture from that evening with all Howell folks who attended.



(From left: Dan Holmes, Jeanne Farina, Paul Pominville, Chuck Breiner, Lynn Parrish, Carole Colburn, Elson Liu. In front: Sue Drazic and Christine Schoendorff.)

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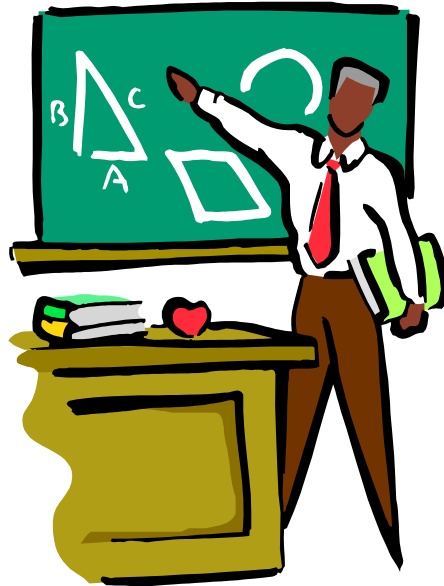


**“With wireless sleep technology, the people
in my dreams can send e-mail and faxes
to the people in your dreams!”**

***FYI:** The Staff Development Lab is now up and running and open for business. The new lab is located just next to "Suite E" in the administrative wing of the Freshman Campus. It is fully equipped with 28 wireless laptop computers, 2 desktop stations with two scanners, and one teacher station, connected to the LCD Projector and Smart Board. In addition, a printer is network connected and ready to use in the back of the room. While the priority for use of this room and equipment is for staff development, teachers at the Freshman Campus may also check the laptops out for use in their own rooms. If you are interested in scheduling the staff development lab and/or the computers, please contact either*

Carole Colburn (colburne@howellschools.com) or Kim Blair (blairk@howellschools.com).

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Lesson Plan of the Month

The following lesson plan comes from <http://www.microsoft.com/education>

Lesson Title: Candy is Dandy

Grades Level: Middle School

Curriculum Connections: Math, Language Arts

Required Software: Microsoft® Word, Microsoft® Excel

Optional Software: Optional Software: Microsoft® Internet Explorer, Microsoft® Works

What's in this Lesson:

- [Teacher Guide \(including How to Begin\)](#)
- [Student Activity, Step-by-Step:](#)

[Step A: Color Distribution](#)

[Step B: Creating a Worksheet](#)

[Step C: Adding Formulas](#)

[Step D: Creating Graphs](#)

[Step E: Writing the Report](#)

Teacher Guide

Summary: This lesson shows students the benefits of using graphs to communicate information, answer questions, and solve problems as they investigate color distribution in bags of M&M's. Working with actual bags of candy, students will sort and classify contents, summarize their findings on a worksheet, convert the numbers into charts, and make predictions about color distribution in other bags of candy.

Objectives:

To introduce students to the concept of graphing, record color distribution in spreadsheet format, and utilize information obtained through hands-on research and analysis to write a research report.

Prerequisite Skills:

Knows how to use Microsoft Word to create a document including formatting and editing text, how to create a Microsoft Excel worksheet including creating formulas, and create presentations using Microsoft PowerPoint.

Time Allotted:

Approximately 2-3 days

How to Begin:

Introduce students to the concept of charting and discuss why some data collections are better represented by bar charts, while others may be easier to interpret as line charts or pie charts. Explain that while there are no sure-fire rules that state which chart type to select for a particular data set, it is important to select a chart type which gets a message across in the most effective way. Bar charts, for example, allow for a comparison of values within a category, line charts emphasize a progression of change, and pie charts show the relationship of a part to the whole. Tell students that this lesson requires them to work with several bags of candy of differing weights. They will be sorting the contents of each bag by color, recording the number of candies for each color, and representing observations in both a worksheet table and several types of charts.

Adaptability

Students can use Internet Explorer to visit the [M&M's Web page](#) and take a virtual tour of the factory. They can send electronic mail to the company, indicating which colors they like best and which colors they would like to see in future bags of candies.

Encourage older students to summarize their research findings in a letter to:

Consumer Affairs Department

M&M/Mars

Hackettstown, NJ 07840-1503.

Students can use Microsoft Word's Letter Wizard to get started.

Student Activity

Description: You are going to conduct some market research about M&M's. First, you will sort and classify the contents of several bags of M&M's, summarize your findings on a worksheet created in Microsoft Excel, convert the numbers into charts, and make predictions about color distribution in other bags of candy.

Step A

Color Distribution

Software: Microsoft Word

WHAT TO DO: Work in pairs using several small-size bags of M&M's, or two larger-sized bags.

Before opening any bag of candy, take a guess about the colors you expect to find. Do bags of equal weight have an identical number of candies? Are all colors represented equally or are some more popular than others? Does color distribution remain constant no matter how small or large the bag?

Record your answers in a Word document and save for later reference.

Step B

Creating a Worksheet

Software: Microsoft Excel

WHAT TO DO: Open a worksheet in Microsoft Excel. In cell A1, type the title Candy Is Dandy! In row 3 beginning in cell A3, type the headings Colors, Bag 1, Bag 2, Bag 3, Bag 4 and Average. Type the weight of the bags of M&M's in a comment. Click in cell B3, choose Comment from the Insert menu, and then type the weight in the yellow pop-up. Now, anytime you move your cursor over that cell, the weight will appear.

| | A | B | C | D | E | F | G |
|----|------------------------|--------------|----|----|--------------|----------------|---|
| 1 | CANDY IS DANDY! | | | | | | |
| 2 | | | | | | | |
| 3 | COLORS | BAG 1 | | | BAG 4 | AVERAGE | |
| 4 | Blue | 6 | | | 8 | 6 | |
| 5 | Brown | 4 | | | 7 | 5 | |
| 6 | Green | 3 | | | 5 | 4 | |
| 7 | Orange | 7 | 7 | 4 | 4 | 6 | |
| 8 | Red | 5 | 5 | 7 | 3 | 5 | |
| 9 | Yellow | 4 | 6 | 3 | 5 | 5 | |
| 10 | TOTAL | 29 | 29 | 30 | 32 | 30 | |
| 11 | | | | | | | |
| 12 | | | | | | | |

A yellow comment box is overlaid on cell B3, containing the text "1.69 oz." with an arrow pointing to the cell.

Cell Notes pop-up from Microsoft Excel

In column A, beginning in cell A4, list all of the colors of M&M's you found in your bags.

Next, sort the list alphabetically by highlighting the cells and choosing Sort from the Data menu. Type the word "Total" in the cell below your last entry.

Now you can format your worksheet in a variety of ways. Choose AutoFormat from the Format menu and select the format of your choice!

Step C

Adding Formulas

Software: Microsoft Word; Microsoft Excel

WHAT TO DO: Enter the number of same color M&M's in the corresponding cells beginning with Bag 1. Use the AutoSum function to total your columns. Highlight cells B10:E10. Choose Fill from the Edit menu, and then choose Right.

Now, you can automatically calculate the average number of each color per bag. Click in cell F4, then type the formula **=average(B4:E4)**. Highlight cells F4:F10. Choose Fill from the Edit menu, and then choose "Down." Format cells in the Average column so that a whole number is returned (i.e. no decimal places) by using the Decrease Decimal button on the Formatting toolbar.

Interpret your data. Are some colors more numerous? Do all bags have the same number of candies? Compare your observations with the findings of students in other groups. Are the same colors more numerous from one group to another? Is color distribution consistent in bags of differing weights?

Step D

Creating Graphs

Software: Microsoft Excel

WHAT TO DO: Use the Chart Wizard in Microsoft Excel to produce at least two different charts

Choose the chart types that best represent the data such as bar chart or column chart. You might chart the distribution of colors in a single bag, or the total number of candies for all bags in your sample.

Highlight cells A3:E9. Choose Chart from the Insert menu. Click the Column chart type, and then click the "Next" button. Click the Data Range tab, and be sure Columns is selected next to Series In, then click Next. In step 3 of the Wizard (Chart Options), click the Titles tab. Add titles for the chart and its axes. Click the Gridlines tab and experiment with gridline options. Choose a gridline that makes it easier to understand the data. Click Legend tab and choose a locations for the legend, then click "Next."

Finally, have Microsoft Excel place the chart as an object on the original worksheet, so that worksheet entries are visible as you examine the chart.

Step E

Writing the Report

Software: Microsoft Word

WHAT TO DO: Students can use Word to describe the research project, the procedures they employed to sort and count the candies, and what the data reveals about candy colors and color distribution.

Students should compare their initial hypotheses about the average number of candies per bag and the expected color distribution with actual survey results have them copy and paste spreadsheet and chart data into Word where appropriate.

Reports should discuss the advantages/disadvantages of representing data in spreadsheet tables, column charts, bar graphs, or pie charts. When is it best to use one chart type instead of another? What is the value of using more than one bag of candy to conduct this experiment?

*****If you have a technology-rich lesson that you would like to share with others, please send it to colburnc@howellschools.com no later than the last Monday of the month.**

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Carole's Training Corner

Happy May!

I think spring has FINALLY arrived to stay! ☺ As I look ahead to the last several weeks of the school year, I will be very busy attempting to put some "closure" on my time as your district instructional technology specialist. As you may or may not have heard, I will be moving into the classroom next fall, teaching grades 6-7-8 Technology Literacy at Highlander Way Middle School. ☺ It will be challenging and exhausting and fun for sure! I am looking forward to the chance to work with so many students, but I have to admit, I will miss working with all of you! ☺

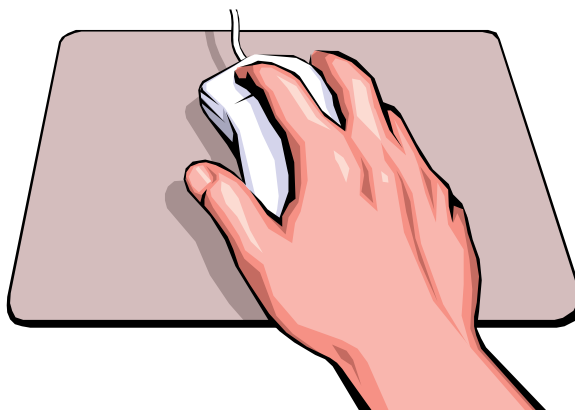
It is my intention to try to continue the HPS TECH TIMES through next year, although I may end up sending these only every other month instead of every month as is the case now. I will be keeping my web site and will attempt to keep you abreast of as many new technology resources as I can. If the district deems it necessary, there still may possibly be some technology training opportunities and if this occurs, I will keep you posted through the web site or through e-mail.

In the meantime, if you have an idea for a technology training session that you would like to have me deliver at your school, please let me know via e-mail at colburnc@howellschools.com. I am happy to work with you to accommodate your technology training needs as best as I can.

Continue to check out my website for training updates: <http://www.howellschools.com/~training>

Remember to keep smiling ~Carole ☺

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Tips & Tricks

The following Tips & Tricks come from: www.wordtipsgold@vitalnews.com/ You can have these tips e-mailed to you directly each day by signing up at the above mentioned site.

SAVING DOCUMENT VERSIONS

Depending on your experience with developing complex documents, you may already be familiar with version control. Many companies maintain separate versions of a document at different benchmarks during the development process. For instance, one saved version may be at the first draft stage, another at the second draft stage, and still another at the public comment stage.

In the past, you may have needed to save different versions of your document in different files. Word supports saving multiple versions of your documents within a single file. This can be handy if you need to see a revision history of your document, and it may make your document management chores a bit easier.

To save a version of your document, follow these steps:

1. Choose Versions from the file menu. Word displays the Versions dialog box.
2. Click your mouse on the Save Now button. Word displays the Save Version dialog box.
3. Enter any comments you want associated with this version. (A good idea is to indicate why you are saving the version.)
4. Click on OK. Word saves the version.

The version saved by Word is essentially a snapshot of how your document looks when the version was saved. Edits you make to the document in the future do not interfere with the saved version.

REVIEWING DOCUMENT VERSIONS

If you are using Word to manage different versions of your document, you may want to review a particular version of a document at some time. To review a saved version, follow these steps:

1. Choose Versions from the file menu. Word displays the Versions dialog box.
2. Using the list of existing versions, select the version you want to review.
3. Click on View comments if all your comments do not fit within the Versions dialog box.
4. Click on Open.

At this point, Word opens the version in addition to your already open (current) version of the document. Word displays the two in separate windows, on-screen at the same time. When you are through reviewing the version, simply close it as you would any other document file.

REMOVING THE BORDER FROM A TEXT BOX

When you insert a text box in your document, Word automatically places a border around it. This is great for some document designs, but you may prefer to remove the border. To remove the border from a text box, follow these steps:

1. You can either click on the border of the text box or position the insertion point within the text box. (If you click on the text box, handles appear around the perimeter.)
2. Select the Text Box option from the Format menu. Word displays the Format Text Box dialog box.
3. Click on the Colors and Lines tab, if necessary.
4. In the Color drop-down list, select No Line.
5. Click on OK.

DISPLAYING A HIDDEN FIRST ROW

Excel makes it easy to hide and unhide rows using the menus. What isn't so easy is displaying a hidden row if that row is above the first visible row in the worksheet. For instance, if you hide rows 1 through 5, Excel will dutifully follow out your instructions. If you later want to unhide any of these rows, the solution isn't so obvious.

To unhide the top rows of a worksheet when they are hidden, follow these steps:

1. Choose Go To from the Edit menu, or press F5. Excel displays the Go To dialog box.

2. In the Reference field at the bottom of the dialog box, enter the number of the row range that you want to unhide. For instance, if you want to unhide rows 2 through 3, enter 2:3.
3. Likewise, if you want to unhide row 1, enter 1:1.
4. Click on OK. The rows you specified are now selected, even though you cannot see it on the screen.
5. Choose Row from the Format menu, and then choose Unhide.

UNDERSTANDING COLUMN WIDTHS

You may have noticed that Excel uses a strange way to specify column widths. Next time you open a new workbook, take a look at the widths of your columns. Have you ever wondered how Excel comes up with widths such as "8.43?"

The answer lies rooted in history somewhere. The default column width is specified as a number of characters. Thus, "8.43" as a column width means that 8.43 characters--in the default font--can fit within the width of the column.

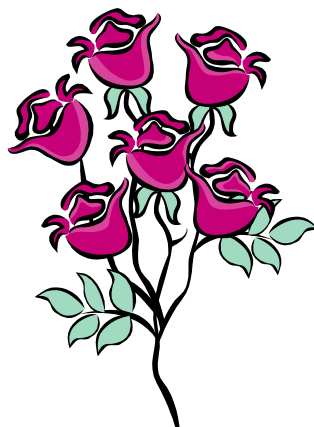
This used to mean something very understandable in the "olden days" before proportional fonts came on the scene. When monospace fonts ruled the computer world, you knew that there were either 10 or 12 characters per inch. VisiCalc (the first spreadsheet program) and Lotus 1-2-3 (the first gangbusters program for the IBM PC) both allowed you to specify column widths as a number of characters. MultiPlan (the ancestor to Excel) followed the same practice, and that practice carries forward to this day.

A good way to test this is to look at how many digits you can get in a column, since each digit is the same width as any other digit in a given font. If the column width is 8.43, then you can get 8 digits (12345678) in the cell without Excel making it wider or changing to scientific notation.

If you want to find out the default font being used by Excel--and thus on which the column widths are based--then choose Options from the Tools menu and click on the General tab. The default font specification is indicated and may be changed on this tab.

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**Great "Mother's Day Crafts and Projects" Links
For You to Try...**

http://www.garvick.com/annual/mothers_day/crafts.htm

<http://www.craftfreebies.com/MothersDay.html>

<http://www.allcrafts.net/news/may2000.htm>

<http://rubyglen.com/crafts.htm>

<http://www.garvick.com/free-stuff/arts-crafts.htm>

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